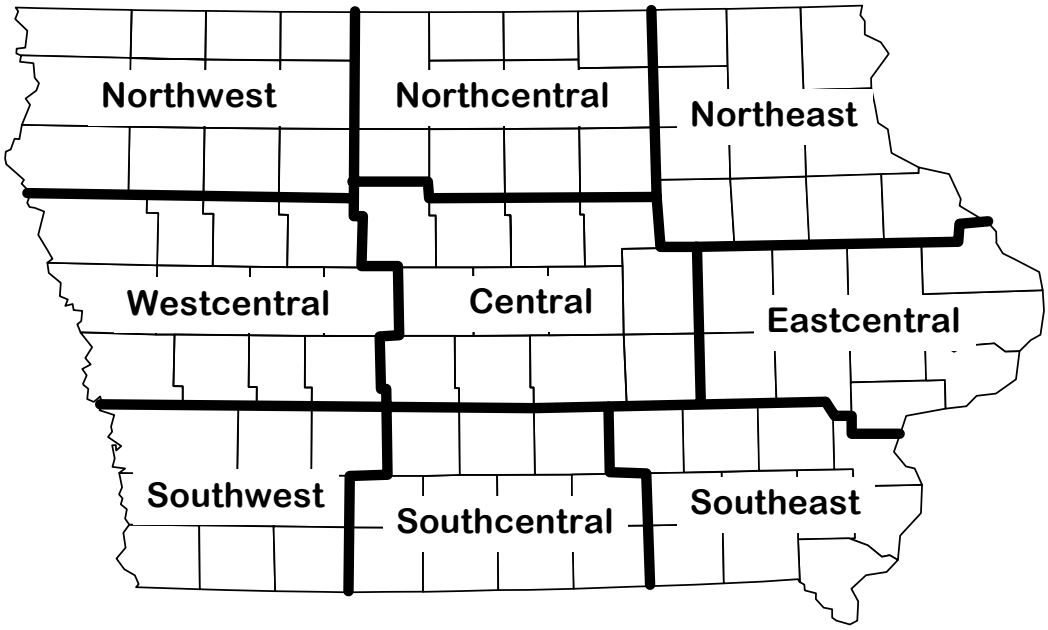
UPLAND WILDLIFE

HISTORICAL SUMMARY OF POPULATIONS AND HARVEST

Ring-necked Pheasant

The ring-necked pheasant now found in Iowa has been classified as (*Phasianus colchicus torquatus*). This name suggests a cross between 2 of the true Asiatic pheasants. One the Rion Caucasian (Black-necked) pheasant (*Phasianus colchicus colchicus*) native to the area between the Black and Caspian Seas and the true Chinese ring-necked pheasant (*Phasianus torquatus torquatus*) found in eastern China and northwestern Indo-China. Pheasant were first introduced into Iowa in September of 1900 or 1901 when a severe windstorm wrecked the pens of a game breeder named William Benton of Cedar Falls releasing approximately 2,000 birds. Benton's birds spread west and north and constitute the foundation stock of Iowa's north-central counties. In 1904 an unsuccessful planting was made in Keokuk county. In 1907 a successful stocking was made in Kossuth county and in 1908 successful stockings were made in O'Brien county. Private individuals made all of these early stockings. It is uncertain just when the state began stocking pheasants. Department records only date back to 1921, but it is certain by 1913 large state stockings were being made annually. Records show Butler county received 500 state birds in 1913 and 400 in 1915. The first state game farm was authorized in 1913, probably at Spirit Lake, because records show 200 state birds escaped from that game farm in 1915. Between 1915-18 all northeastern Iowa counties received plantings of 200-800 birds, with 1 large stocking of 2,500 at Pilot Knob State Park in Winnebago county. Stockings were usually made on timbered land leased by the state from private individuals. In 1915 the state established 2 more game farms at Clive and Lansing. Both game farms remained in operation until 1931. Between 1913-32 the state released an estimated 100,000 to 150,000 pheasants, both wild trapped and pen-raised birds. Virtually all of the original releases made in the northern half of the state were a success. Widespread abundance was first attained in Winnebago county in 1916, Dickinson in 1917, Floyd by 1919, Humboldt by 1920, Hardin and Hamilton counties by 1924, and Sac by 1927. In 1925, pheasants had become so abundant in Iowa's north-central counties that the state began to trap and gather eggs for southern Iowa. In 1925 farmers collected 60,000 wild eggs and trapped 7,000 birds from Butler and Winnebago counties. Most southern Iowa counties received large stockings in 1905-17, 1924-25, and 1928-30, but all were considered a failure. In 1905, it was generally assumed that southern Iowa had better pheasant habitat than northern Iowa. The existence of this belief is supported by the fact that up until 1913 it was customary to make stockings in timber.

Figure 5.1. Survey regions for the August Roadside Survey.



It is interesting to note Iowa's pheasant populations reached their highest abundance in the Des Moines Lobe landform. The early success, 1920-40's, of pheasants in north central Iowa was undoubtedly due to the abundance of grassy habitats (tame and native hay, oats, flax, and prairie pothole wetlands) interspersed with weedy crop fields. Iowa's first pheasant season was held October 20-22, 1925 in Kossuth, Humboldt, Winnebago, Hancock, Wright, Cerro Gordo, Franklin, Mitchell, Floyd, Butler, Grundy, Blackhawk and Bremer counties. The hunting season opened 1/2 hour before sunrise and ended at noon with a bag limit of 3 cocks. It appears the decision to open counties to hunting in these early years was based largely on pheasant crop depredation complaints as annual pheasant censuses, predecessor to the August Roadside Survey, were not begun until 1935. Flush count records show 7 men flushed 850 pheasants in 5 hours in Hancock county in 1931. By 1945 most of northern Iowa was open to hunting and by 1965 all of Iowa, except a few southeastern counties, was open to pheasant hunting. The entire state was opened to hunting in 1976.

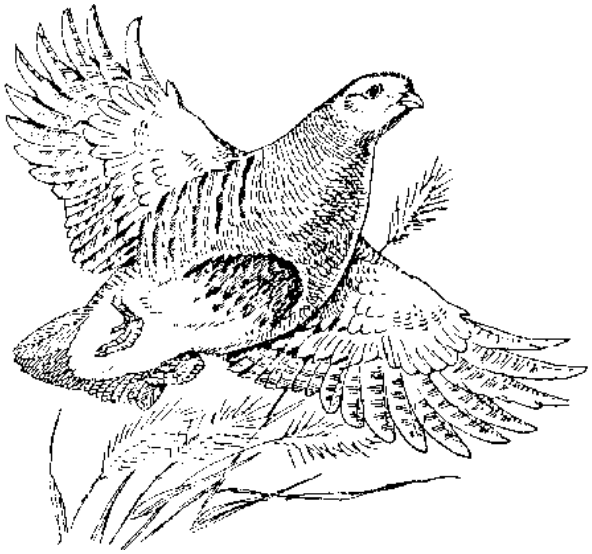
Historically (1930-50's), the NW, NC, and C regions had Iowa's highest pheasant densities (Fig. 5.1). However, intensified agriculture has led to a decline in pheasant populations since the 1960's (Fig. 5.2). Regionally, the greatest declines have occurred in the NC, C, and SW regions (Fig. 5.7). By the early 1970's southern Iowa had become the states premiere pheasant range. Populations have declined following severe winter weather in 1964-65, 1966-67, 1978-79, and 1981-82 with recoveries occurring in years with milder winters (Table 5.1). While the number of broods sighted/30-mile route has also fluctuated with the severity of the winter (Fig. 5.3), the all-time lows recorded in 1983, 1984, 1993, and 1999 were the results of very cool, wet conditions during spring and early summer (Table 5.2; Fig. 5.3). Observed brood sizes have declined slightly since 1962, with the 1992 and 1998 estimates (4.6 chicks/brood) the lowest ever

recorded (Table 5.2; Fig. 5.3). Modest recoveries of all survey parameters occurred between 1984 and 1996 with the enrollment and seeding down of 2.2 million acres of row crops in the 10-year federal Conservation Reserve program (CRP). Pheasant populations in historical ranges, northern and central regions, have rebound since the inception of CRP (Fig 5.7). Populations in the southern regions initially responded to CRP the same way northern and central populations did, but recently have declined. Declines in SW and SC regions, in particular, are likely related to persistent wet weather during the nesting season since 1992. The pheasant season opens the last Saturday in October and runs through January 10th, statewide with a bag/possession limit of 3/12 roosters (Table 5.10). Shooting hours are 8 a.m. to 4:30 p.m. Iowa's first youth pheasant season was held during the 1997-98 hunting season. Youth hunting was allowed statewide for resident hunter's 15 years or younger whom a licensed adult accompanied. The youth pheasant season opens the weekend proceeding the regular season. Bag limit is 1 rooster/day with 2 in possession after the first day (Table 5.10).

Bobwhite Quail

Our native bobwhite was probably never very abundant on Iowa's virgin prairie; most populations were likely restricted to the prairie-timber edges of Iowa. Early settlement changed Iowa's landscape forever. However, at least initially these changes proved to be a boom to Iowa's quail population. Between 1860-90 settlers began carving up Iowa a 1/4 section at a time, but early settlers lacked timber and wire to make fences, so they planted Osage hedges instead. Three to 6 miles of some of the finest quail cover ever grown in ever 1/4 section, all within spitting distance of newly planted "weedy" grain fields. Quail populations exploded like never seen before or likely to be seen again. Quail could be found in every county, but these conditions could not last. By 1920 reports show quail populations beginning to decline as farming practices improved and hedgerows were replaced with barbed wire fence. The 1931-32 winter quail survey reported population densities of 1 quail per 20-40+ acres in the northern third of the state, 1 quail/6-20 ac. in the central third and 1 quail/1-6 ac. in the southern third of the state. However, quail populations have declined steadily, both nationally and in Iowa since the 1930's. Large scale landscape changes and clean farming practices are considered the major factors in this decline. Since survey procedures were standardized in the early 1960's the mean number of quail/30 miles sighted on the August roadside survey has fluctuated over the years with significant declines occurring since 1977 (Fig. 5.6). This decline, along with the severe fluctuations in SW and SC Iowa in recent years, are related to losses in woody habitat and clean farming practices that have occurred since row-crop agriculture expanded in the mid 70's and early 80's (Fig. 5.8). The severe winter of 1995-96 decimated populations in SC and SE Iowa (Fig. 5.8).

Quail have been hunted in Iowa since settlement. The first bag limit was set in 1878 at 25 birds/day, it was reduced to 15/day in 1915. The season was closed in 1917 and a limited season reopened in 1933. Currently the season opens the last Saturday in October and runs through January 31st, statewide, with a bag/possession limit of 8/16 birds. Shooting hours are 8 a.m. to 4:30 p.m. (Table 5.11).



Gray Partridge

Senator H.W. Grant of Waterloo made the first release of Hungarian or gray partridge in Iowa in Blackhawk county in 1902, but all 50 birds died. The first successful release of Huns in Iowa occurred in Palo Alto county in 1905. This release constitutes Iowa's first wild stock. Successful releases were made in Humboldt county in 1906, O'Brien in 1909, and in Kossuth in 1910. By 1914 most northern Iowa counties had received standardized releases of 20 pairs each. All releases, similar to pheasants, were made on leased timbered lands. Reports show many local farmers were surprised when the bird promptly moved to the nearest prairie upland. By 1932 it is estimated the state conservation commission had stocked 20,000+ partridge in Iowa. Most plantings were in northern Iowa, although a few were attempted in south central Iowa; all southern attempts failed. The birds gained their strongest hold in northwest Iowa in Osceola, O'Brien, Dickinson, and Clay counties and were generally present in most northern Iowa counties by 1940.

While numbers of other upland game birds have decreased over time, the number of gray partridge sighted on roadside counts had been increasing until 1990 (Fig. 5.6). Not only had the mean number partridge per 30-mile route increased statewide, but partridge populations had expanded their range from the NW and NC regions to all other regions of the state by 1986 (Fig. 5.9). While losses of woody cover and nesting cover have created less favorable conditions for pheasant and quail, partridge have been more adept at coping with row-crop expansion. The statewide increase in partridge numbers between 1983-89 might be partially attributed to mild winters, drought conditions, and improved nesting conditions on land enrolled in CRP. Five wet and cold nesting seasons during the last 6 years have caused partridge numbers to decline significantly (Fig. 5.6). Huns were imported to this country from the arid, steppe region of southeastern Europe and northern Asia, and research has shown they do not reproduce well in this country during years with wet springs.

Iowa's first partridge season was held in 11 northwestern counties in 1937-39. Standardized hunting seasons were established in 1963. Partridge season opens the second Saturday in October and runs through January 31st, statewide, with a bag/possession limit of 8/16 birds. Shooting hours are 8 a.m. to 4:30 p.m. (Table 5.12).

Eastern Cottontail

Little is known about the presettlement distribution of cottontail rabbits in Iowa. Cultivation by man no doubt favored rabbits much the same way it favored quail at the turn of the century. Cottontails prefer habitats similar to quail, favoring shrubby-grassy edge habitats. Cottontails may have up to 6 litters a year in Iowa and reproduce best during warm moderately wet springs. Numbers of cottontail rabbits observed on the August roadside survey have fluctuated with changing land use and weather conditions (Fig. 5.6). Hunter interest has declined in recent years (Fig 5.12).

Cottontails have been hunted in Iowa since settlers first arrived. The cottontail season was standardized in 1978 and opens the first Saturday in September and runs through February 28th, statewide, with a bag/possession limit of 10/20 rabbits. Shooting hours are sunrise to sunset (Table 5.13). The rule regarding the opening day of the cottontail season was changed in 1997 to open the 1997-98 season on Sept. 1st. This change in date allows inclusion of the Labor day weekend in all years.

White-tailed Jackrabbit

Before settlement white-tailed jackrabbits could be found everywhere in Iowa, except for a few southeastern counties. They appear in greatest abundance on the glaciated soils of the Des Moines Lobe and the Missouri Loess soils of northwestern Iowa. They are most at home on the wide-open expanses of prairie/wetland/pasture habitat types, although moderate cultivation favors the species. Dry growing seasons appear conducive to hare abundance as population's decline in wet years. Jackrabbit counts have declined greatly over time, closely paralleling the losses of pasture, hay, and small grain acreage's. Increases in the late 1980's can be attributed to increases in grass habitats from the CRP and dry springs.

Jacks have been hunted in Iowa since the time of settlement. Conservation officers reported hunters killing 180+ jacks on two circle hunts in Carroll and Buena Vista counties during the winter of 1960. The jackrabbit season opens the last Saturday in October and runs through December 1st, statewide, with a bag/possession limit of 2/4 rabbits. Shooting hours are sunrise to sunset (Table 5.13). Harvests have tended to decline (Fig. 5.6) with the decline in jackrabbit numbers and declining hunter interest.

2001
August Roadside and Small Game Harvest Survey Results

The Iowa Department of Natural Resources (IDNR) conducts 2 statewide surveys to monitor upland game populations in Iowa, the August Roadside survey (ARS) and the Small Game Harvest survey (SGHS).

AUGUST ROADSIDE SURVEY

The ARS is conducted each year by IDNR Enforcement and Wildlife Bureau personnel throughout the state of Iowa during the first half of August. The survey generates data from 210 30-mile routes on ring-necked pheasants, bobwhite quail, gray partridge, cottontail rabbits, and white-tailed jackrabbits. Counts are conducted on sunny, cool mornings with heavy dew. All comparisons are based on total routes run.

2000-01 Iowa Weather Summary

The winter of 2000-01 was one of the most severe in state history. Statewide the cumulative snowfall from December through March was 42.4 inches. This ranks as the 3rd highest total in 129 years of state records. In addition, most of this snowfall (25+") came in December and persisted on the ground

until March. Many areas across the state set new records for continuous snow cover at more than 130+ days with an inch or more of measurable snow. Research with radioed pheasants in Iowa shows winter survival declines the longer snow cover persists. From this year's survey it appears that most upland game species suffered significant losses this past winter. Such a significant loss of adult breeding stock severely limited the reproductive effort this year for most upland game species.

Conditions during the spring 2001 nesting period (April-May) were warmer than normal but very wet. As a general rule, warm and drier than normal springs are conducive to good upland game reproduction, whereas cool, wetter than normal springs are detrimental to reproduction. The January - May 2001 period ranks as the 7th wettest in 129 years of state records. Temperatures for April averaged 3.8 degrees above normal, while precipitation totals varied from about normal across the southern two-thirds of Iowa to over 2 inches above normal in NW Iowa. May temperatures were average across the entire state, but precipitation was 2.8 inches above normal. Precipitation in May averaged from 2+ inches above normal in NW Iowa to over 4 inches above normal in SE Iowa. Rainfall totals in May varied from 5.5 inches in NW Iowa to over 8 inches in SE Iowa.

2001 Roadside Survey Conditions

Weather conditions during the 2001 survey were drier, warmer, and less overcast than in 2000. Only 78% of routes were started under ideal dew conditions in 2001 verses 85% in 2000. Mean temperatures were also higher at the start of routes in 2001 verses 2000. The sun was shining on 85% of the routes started in 2001 versus 78% last year. Most routes were started under clear skies in 2001; 86% verses 67% in 2000. Warmer mornings with little dew tend to decrease the accuracy of the roadside index, but we are confident the numbers reported on this year's survey do represent actual trends in upland game populations.

SMALL GAME HARVEST SURVEY

The SGHS is a random mail survey of Iowa small game hunters conducted following the 2001-02 small game season to determine the size and distribution of Iowa's small game harvest. In 2001, 3,503 of the 8,186 hunters surveyed, returned survey cards for a response rate of 43%. Based on these returns approximately 61% of Iowa's 226,684 (sum of resident, non-resident, and lifetime license holders) licensed hunters pursued small game during the 2001-02 season. This marks the fourth year in a row resident license sales have declined and the fifth year in a row non-resident license sales have declined (Table 5.8; Figure 5.11).

RING-NECKED PHEASANT

Populations This year's index averaged 13.9 birds per 30-miles and represents a 59% decline from the 2000 population index (Table 5.1; Figure 5.2). This is Iowa's lowest statewide pheasant count since survey procedures were standardized in 1962 (Table 5.1). The average number of pheasants observed per route is 63% below the 10-year and 70% below the long-term averages (Table 5.1). Populations declined 50-80% in all regions of the state this year (Table 5.1). Counts in the NE, WC, EC, SW, SC, and SE represent all time lows for those regions (Table 5.1; Figure 5.7).

Most of this year's decline in pheasant populations can be attributed to the severe winter. Iowa has not suffered any major winter losses of pheasants since the winters of 1982-83 and 1983-84. Blizzards in December and January simply froze birds in marginal habitats, and the prolonged white

background left the birds highly visible to predation for over 130+ days in many regions of the state. The very wet conditions that persisted through the early nesting season limited any good reproductive effort of the surviving brood stock. Populations are very low in many regions, but populations have recovered from similar low levels in the past (winters of 1982-83 in northern regions; Table 5.1). How fast our populations recover will depend upon weather this winter and next spring and any changes in habitat that many come about as a result of the new 2002 Farmbill.

Northern Regions. Counts in the NW region declined significantly (-63%) from 2000 (Table 5.1). This year's population estimate is 46% and 41% below the 10-year and long-term averages, respectively (Table 5.1; Figure 5.7). Hens with broods declined 64% from 2000 and total broods declined 71% (Tables 5.2,5.7). Persistent snow cover with several ice storms reduced winter survival even in good habitats, and a severe hail storm centered over Spirit Lake this June reduced recruitment of young significantly. This year's index of 22 birds/30-miles, while low, does not approach the low of 9 birds/30-miles reported in 1984 (Table 5.1). Some of the better counts in the NW region came from Emmet, Dickinson, Plymouth, and Sioux counties.

Counts in the NC region declined 52% from last year (Table 5.1). This year's average of 16 birds/30-mile route is 66% and 69% below the 10-year and long-term averages, respectively (Table 5.1). Similar to the NW region, this year's index in the NC region is still higher than the all time low set back in 1984 (Table 5.1; Figure 5.7). Staff also reports the loss of CRP acreage has greatly reduced nesting habitat in the region. Some of the better counts in this region came from Butler, Hancock, and Franklin counties.

Counts in the NE region set a new all time low for the region for the second year in a row with an average of only 6 birds observed on survey routes in 2001 (Tables 5.1). The counts declined 59% from 2000 (Figure 5.7). The NE region has suffered through persistent wet springs since 1998. This has reduced recruitment each year. Over 45 inches of snowfall this winter reduced hen survival and brood stock even further. The 2001 count was 77% below the 10-year and 87% below the long-term averages, respectively (Table 5.1).

Central Regions. The harsh winter and wet spring also significantly reduced (-71%) populations in the WC region (Table 5.1; Figure 5.7). This year's index of 8 birds/30-miles is an all time new low for the region (Table 5.1). Total hens, hens with and without broods, chicks, and broods all declined by greater than 40% in the WC region in 2001 (Table 5.1, 5.2. 5.7). This year's counts are 79% and 85% below the 10-year and long-term averages, respectively (Table 5.1).

Similar to all other regions, the counts in the Central region declined 56% when compared to last year (Table 5.1). However, this year's average is still above the all time low set in 1983 (Table 5.1). The number of hens with and without broods, and total broods all declined more than 60%. The 2001 count was 50% below the 10-year and 55% below the long-term averages (Table 5.1). Parts of Jasper, Poweshiek, Story, and Webster counties with good habitat should have decent bird numbers this fall.

Pheasant numbers in the EC region declined 49% compared to 2000 (Table 5.1). This year's index of 19 birds/ 30-miles set a new all time low for the region (Table 5.1; Figure 5.7). This year's counts are 57% below the 10-year average and 63% below the long-term averages. Counties reporting

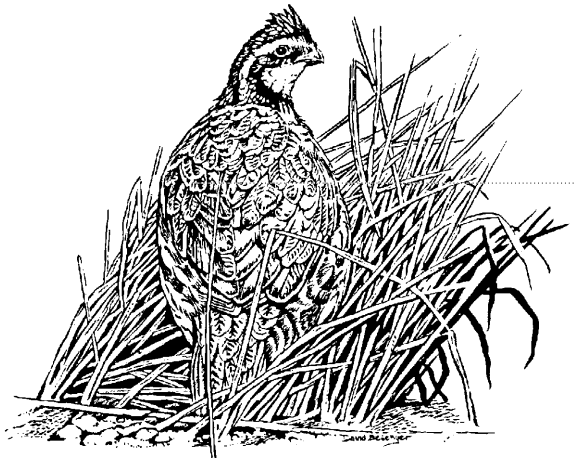
better numbers this year were Cedar, Iowa, Johnson, Jones, and Scott.

Southern Regions. Snowfall in the SW region was the lowest of any region in the state this past winter but still topped 38 inches. The roadside pheasant index dropped to 12 birds/30-miles, the lowest count ever for the region (Table 5.1; Figure 5.7). This years count is 59% and 82% below the 10-year and long-term averages, respectively (Table 5.1). Pheasant populations had rebounded in this region last year following 2 years of wet springs in 1998 and 1999.

The pheasant index in the SC region also set an all time new low with 7 birds/30-miles, a decline of 62% from 2000 (Table 5.1; Figure 5.7). The SC region recorded the highest Dec.-Mar. snowfall total of any region in state last winter with a total of 48.4 inches. The pheasant population is 68% and 83% below the 10-year and long-term means, respectively (Table 5.1). The SC region has suffered through 6 wet springs in the past 9 years. A return to a more normal spring weather pattern is needed for populations to recover in this region.

The SE region reported the largest decline (-79%) in pheasant numbers of any region in 2001 (Table 5.1). The average of 5 birds/30-mile survey route was an all time new low for the region (Table 5.1; Figure 5.7). The SE region recorded 39+ inches of snow this past winter, which is very high for SE Iowa. The SE region also had over 8 inches of rainfall in May or 2 inches per week during the peak of nest initiation and incubation. This year's index is 86% and 84% below the 10-year and long-term means, respectively (Table 5.1).

Harvest An estimated 122,906 pheasant hunters (61% of licensed hunters) took to Iowa's fields last fall and harvested 470,116 roosters, a 53% decline compared to 2000 harvest estimate of 1,001,867 (Table 5.6, 5.9). Resident and non-resident hunter numbers both declined 27% from last year. Resident hunters hunted an average of 7 days last fall and harvested 4 birds during the season. Nonresident pheasant hunters averaged 5 days afield and harvested 5 birds for the season. Hunter success (harvest/trip) was highest during the first 9 days of the season. Approximately 72% of the total pheasant harvest occurred in the first 31 days of the 2001 season. Ninety percent of pheasant hunters reported hunting 15 days or less and over 50% hunted 4 days or less. In addition to the regular pheasant season, an estimated 7,121 pheasant hunters took 11,172 youth hunters (under the age of 16) hunting during Iowa's special 2-day youth pheasant season. These young hunters harvested an estimated 6,595 roosters.



BOBWHITE QUAIL

Populations Similar to pheasant numbers, bobwhite quail numbers also declined significantly (-49%) from 2000 (Table 5.3). This year's statewide index of 0.3 birds/30-mile survey route sets a new low for the species in Iowa (Table 5.3; Figure 5.6). This year's index is 66% and 82% below the 10-year and long-term averages, respectively. All regions, except the EC region, reported lower quail populations, but only the decline in the SW region was statistically significant. Iowa's quail

population remains in a long-term decline (Figure 5.6). Changing land-use, mainly intensified agriculture, is a leading factor in the decline. Unfortunately, this a trend that is likely to continue in the future, unless programs like CRP can be modified to provide for the habitat needs of quail. The best prospects for quail hunters this fall will be the SW and SC regions.

Harvest Approximately 24,591 quail hunters (12% of licensed hunters) harvested 32,226 quail during the 2001-02 quail season. This is a 77% decrease from the 2000 harvest estimate of 140,828 (Table 5.6; Figure 5.6). Resident hunter numbers declined 38%, while nonresident hunter numbers declined 40% compared to 2000. Quail hunters averaged 6 days afield and harvested 1 bird for the season. Hunters afield in November reported the best hunting with few birds harvested after January 10th. Sixty-seven percent of the harvest occurred in the first 31 days of the season. Over 90% percent of quail hunters hunted 13 days or less and over 50% hunted 4 days or less.

GRAY PARTRIDGE

Populations Unfortunately, the winter was no kinder to Iowa's gray partridge population, as this year's statewide index of 1.9 partridge/30-miles was significantly lower (-25%) than last year (Table 5.4; Figure 5.6). Regionally, partridge populations declined in the NW, NC, C, and EC. Only the declines reported in the NW and NC regions were statistically significant, indicating some routes in the C and EC were lower than in 2000, but some were also higher. Gray partridge numbers increased in the NE and WC regions in 2001, but the changes were not significant (Table 5.4; Figure 5.9). The fact the changes were not significant suggests that while many of the survey routes in the NE and WC regions reported more partridge, a good number also reported fewer. Populations in these regions will be higher in some areas and lower in others compared to 2000. Statewide, the gray partridge index is 44% below the 10-year average and 58% below the long-term average (Table 5.4). Some of the better counts for partridge in 2001 came from Lyon, O'Brien, Sioux, Cerro Gordo, Winnebago, Bremer, Sac, Dallas, Hamilton, and Webster counties.

Harvest Some 5,757 partridge hunters (3% of licensed hunters) harvested 5,814 partridge in 2001-02 (Tables 5.6, 5.9). The harvest was 70% lower than the 2000-01 estimate of 19,258 and represents a new all time low for partridge harvest in Iowa, the previous low was the 1995 harvest of 6,700. Total hunter numbers only declined 5% from last year, but the average harvest per hunter declined 69%. Partridge are usually harvested incidental to pheasant hunting and encounters with partridge were the highest in the northwest region of Iowa.

COTTONTAIL RABBIT

Populations The winter of 2000-01 also took its toll on Iowa's cottontail rabbit population as counts declined 41% compared to last year (Table 5.5; Figure 5.6). This year's index of 3.9 rabbits/30-mile survey route is the third lowest count since survey procedures were standardized in 1962 (Table 5.5). This year's cottontail index is 33% below the 10-year and 38% below the long-term averages (Table 5.5). The fact that cottontails usually produce 4-5 litters per year and wet springs usually do not impact reproduction suggests the severe winter was the major culprit in the decline of Iowa's upland game populations this year, including rabbits. Field staff reported good rabbit numbers in Lucas, Wayne, Monroe, Ringgold, Davis, and Page counties.

Harvest Some 36,125 cottontail rabbit hunters (14% of licensed hunters) harvested 196,483 rabbits last fall, a 44%

decline from 2000 harvest estimate (Tables 5.6, 5.9). Resident hunter numbers declined 22% compared to last year, while nonresident numbers declined 28%. The average rabbit hunter harvested 5 rabbits last fall compared to 8 rabbits in 2000. Almost 20% of rabbit hunters hunted only 1 day last fall, while greater than 50% reported hunting 3 days or less. Similar to the harvest of other small game species, the 2001-02 cottontail harvest was a new all time low for Iowa. Previous low was 237,000 in 1999.

WHITE-TAILED JACKRABBIT

Populations The 2001 statewide jackrabbit index doubled when compared to the 2000 index, but the change was not significant statistically (Table 5.3; Figure 5.6). This years index is 34% and 71% below the 10-year and long-term averages, respectively (Table 5.3). Jackrabbit populations likely faired better than most upland game species this past winter because they actively snow burrow and molt to a white pelage in winter, which gives them perfect camouflage on a snow white landscape. Most jackrabbits were observed in the NW, NC, and C survey regions.

Harvest According to this year's survey 2,933 small game hunters also harvested 3,840 jackrabbits in 2001 (Tables 5.6, 5.9). Less than 1% of Iowa's licensed hunters stated they hunted jackrabbits, and most of this hunting is likely incidental to other types of hunting. The average jackrabbit hunter harvested 1 jackrabbit for the season.

Table 5.1. Mean number of pheasants counted/30-mile route on the August roadside survey regionally and statewide (1962-present). Severe winter weather preceded the August counts in 1965, 69, 75, 79, and 82. Abnormally wet weather occurred during the 74, 83, 84, 93, and 99 nesting seasons. Winter sex ratio and cock harvest data are statewide estimates. Sex ratio counts were done the year succeeding the year listed.

YEAR	NORTH WEST	NORTH CENTRAL	NORTH EAST	WEST CENTRAL	CENTRAL	EAST CENTRAL	SOUTH WEST	SOUTH CENTRAL	SOUTH EAST	STATEWIDE	SEX RATIO	COCK HARVEST
1962	84.7	95.5	85.3	85.0	74.6	32.3	44.4		12.8	65.9		
1963		200.4	40.8		60.3		200.4		19.8	52.6	2.9	66%
1964	99.9	138.0		101.6	54.4	53.9	92.6	26.3	18.3	79.4	4.3	77%
1965	46.0	67.5	47.8	64.7	36.2	43.9	97.6	44.6	22.8	49.9	3.2	69%
1966	43.5	75.3	57.5	58.4	49.3	63.9	144.1	40.7	17.1	56.6	3.1	68%
1967	31.0	56.8	57.2	42.4	53.2	58.6	108.3	38.8	21.1	49.1	4.2	76%
1968	38.0	56.0	56.6	53.5	52.2	64.3	127.4	38.7	19.7	52.7	3.6	72%
1969	18.8	44.7	62.5	42.2	57.6	57.2	77.9	44.2	25.2	45.5	3.5	71%
1970	39.2	53.0	59.6	56.1	87.8	91.7	129.1	63.8	40.5	66.2	3.5	71%
1971	34.6	45.2	49.0	66.2	82.6	104.3	101.6	49.7	48.4	62.0	3.6	72%
1972	37.9	44.6	61.0	61.4	73.2	88.6	112.3	54.3	25.8	59.6	2.0	50%
1973	47.0	56.9	65.4	66.3	88.7	103.5	72.4	54.3	30.2	65.8	3.7	73%
1974	46.6	53.2	52.5	60.5	40.0	55.9	90.1	49.6	16.8	49.7	4.5	78%
1975	10.5	28.7	52.3	34.3	43.2	64.3	51.0	45.4	27.4	38.8	4.8	79%
1976	14.8	42.2	68.1	44.8	54.9	75.4	61.7	49.2	28.7	48.2	4.0	75%
1977	26.9	44.2	86.7	56.9	50.8	78.5	75.1	44.3	24.4	51.7	3.6	72%
1978	36.3	26.1	68.8	67.8	50.5	63.2	76.7	45.5	30.5	49.7	3.9	74%
1979	40.1	29.6	44.8	49.4	39.2	39.6	80.9	51.5	21.8	42.4	3.5	71%
1980	51.2	61.7	81.2	98.7	72.2	63.5	82.1	68.9	37.2	67.0	3.7	73%
1981	66.4	53.5	83.6	92.9	57.8	72.9	97.1	57.8	35.2	65.9	3.4	71%
1982	26.7	27.9	38.9	55.5	23.1	20.9	41.6	47.7	19.3	32.3	2.9	65%
1983	9.6	12.8	21.7	21.6	13.3	25.3	42.6	51.1	27.5	23.7	2.9	65%
1984	8.8	11.1	19.2	22.1	14.4	24.5	23.8	38.5	26.4	20.6	2.6	62%
1985	21.6	28.0	36.4	40.0	32.7	26.0	59.2	72.6	42.0	38.9	2.1	52%
1986	27.5	20.4	48.2	31.2	24.8	29.0	49.7	65.2	27.2	34.8	2.0	51%
1987	40.2	36.8	59.7	61.4	41.1	33.2	58.5	64.2	39.0	46.8	2.9	65%
1988	33.6	35.0	45.1	60.8	29.6	26.0	45.7	49.8	29.8	38.1	3.3	70%
1989	25.3	36.5	52.1	69.9	57.1	35.3	38.6	40.0	39.0	43.2	2.9	66%
1990	34.3	49.4	63.9	57.9	44.3	24.7	44.5	31.7	27.3	41.2	5.5	82%
1991	37.3	45.3	48.8	77.6	41.6	33.3	61.2	49.4	41.6	46.8	Discontinued	
1992	24.4	50.5	30.5	44.0	42.1	37.8	29.4	23.6	34.2	35.8		
1993	15.8	21.4	15.2	55.2	23.8	25.0	34.3	24.0	28.1	25.9		
1994	45.0	74.1	33.3	83.3	55.6	67.8	47.3	46.0	56.7	56.9		
1995	26.0	63.2	37.6	44.7	54.3	54.3	43.7	27.8	43.2	44.6		
1996	54.7	61.8	29.5	45.2	49.8	59.4	29.8	19.5	28.2	43.4		
1997	46.1	62.0	41.2	37.3	54.7	47.4	31.7	28.8	41.3	44.8		
1998	74.2	56.7	43.1	33.9	49.6	53.9	18.1	15.7	41.7	44.6		
1999	42.7	33.6	21.6	19.5	37.9	36.0	17.5	12.9	27.0	29.1		
2000	60.6	33.3	14.9	29.0	50.3	37.0	25.5	19.3	22.0	34.3		
2001	22.4	16.0	6.2	8.4	22.0	19.0	12.0	7.3	4.6	13.9		
Statistics:												
10 Year Avg.	41.2	47.3	27.3	40.0	44.0	43.8	28.9	22.5	32.7	37.3		
Long-term Avg	38.2	51.2	48.4	53.9	48.5	51.1	66.9	42.2	29.2	46.5	3.4	69%
Percent Change from:												
2000	-63.1	-51.8	-58.7	-71.2	-56.3	-48.5	-52.9	-62.3	-79.2	-59.4		
10 Year Avg.	-45.7	-66.1	-77.4	-79.2	-50.1	-56.5	-58.5	-67.6	-86.0	-62.7		
Long-term Avg	-41.4	-68.7	-87.3	-84.5	-54.7	-62.7	-82.1	-82.7	-84.3	-70.1		

Table 5.2. Mean number of broods counted/30-mile route and chicks/brood observed on the August roadside survey, regionally and statewide (1962-present). Severe winter weather preceded the August counts in 1965, 69,75,79, and 82. Abnormally wet weather occurred during the 83, 84, 93, and 99 nesting seasons.

	NORTH WEST		NORTH CENTRAL		NORTH EAST		WEST CENTRAL		CENTRAL		EAST CENTRAL		SOUTH WEST		SOUTH CENTRAL		SOUTH EAST		STATEWIDE	
	BROODS PER	CHICKS PER	BROODS PER	CHICKS PER	BROODS PER	CHICKS PER	BROODS PER	CHICKS PER	BROODS PER	CHICKS PER	BROODS PER	CHICKS PER	BROODS PER	CHICKS PER	BROODS PER	CHICKS PER	BROODS PER	CHICKS PER	BROODS PER	CHICKS PER
YEAR	30 MI	BROOD	30 MI	BROOD	30 MI	BROOD	30 MI	BROOD	30 MI	BROOD	30 MI	BROOD	30 MI	BROOD	30 MI	BROOD	30 MI	BROOD	30 MI	BROOD
1962	10.1	5.1	11.5	5.7	10.1	6.3	9.6	7.7	8.0	7.5	4.2	5.4	5.5	5.8			1.0	7.3	7.7	6.3
1963	17.2		16.6		11.7	5.2	12.3		8.4	5.9	5.8		15.4	5.4	3.4		2.6	5.4	10.4	5.4
1964	12.1	5.2	17.0	6.1	22.7	7.3	13.0	5.8	7.3	5.3	6.5	6.2	12.1	6.4	3.1	8.7	1.8	6.3	9.8	6.1
1965	5.9	5.9	8.0	6.2	5.7	5.7	8.7	5.0	4.7	5.8	4.8	7.6	13.3	5.8	5.9	6.0	2.5	6.0	6.2	6.0
1966	5.5	5.6	9.2	5.9	7.7	4.5	8.1	5.9	6.2	6.4	7.7	6.3	19.0	6.3	5.1	6.2	1.8	7.4	7.2	6.0
1967	3.9	4.6	6.7	5.3	7.1	5.4	5.3	4.8	7.0	5.0	7.5	5.5	13.9	5.4	6.0	5.6	2.3	5.1	6.3	5.2
1968	5.2	5.1	6.4	6.2	6.3	6.3	7.3	5.1	7.1	5.8	8.5	5.6	16.8	5.8	5.5	5.9	2.3	6.4	6.8	5.8
1969	2.3	4.9	5.4	6.0	7.5	6.7	5.2	5.8	7.0	5.6	8.7	5.0	10.8	5.4	6.4	5.5	3.3	5.4	6.0	5.5
1970	5.4	5.9	7.0	5.7	7.7	6.1	7.4	5.7	12.3	5.9	11.7	6.2	18.0	6.4	8.8	5.9	4.6	6.4	8.8	6.0
1971	4.2	5.5	6.3	5.4	6.8	5.0	9.6	4.9	10.7	6.2	14.0	5.8	15.0	5.7	7.4	5.4	6.8	5.8	8.5	5.5
1972	5.2	5.3	5.9	5.7	8.6	5.4	8.1	5.0	9.8	5.9	11.2	6.0	15.1	6.1	7.7	5.7	3.8	4.8	8.0	5.6
1973	6.4	4.6	7.2	5.6	8.8	5.5	8.6	4.7	11.8	5.1	13.0	5.6	9.7	5.4	7.5	5.9	4.1	5.5	8.6	5.3
1974	6.7	4.6	7.3	4.8	6.9	5.5	8.5	5.0	5.4	4.7	8.3	4.4	12.1	5.4	7.8	5.0	2.2	5.2	7.0	4.9
1975	1.4	5.4	4.1	5.0	8.3	4.9	4.7	5.3	6.4	4.8	9.1	5.1	7.4	5.4	6.5	5.8	4.4	5.2	5.7	5.2
1976	2.3	5.1	6.0	5.1	9.7	5.1	6.3	5.2	8.9	4.6	11.3	5.3	9.7	5.2	7.8	5.4	3.9	4.9	7.2	5.1
1977	4.6	4.9	6.4	5.7	12.8	5.6	10.7	4.6	7.7	4.7	13.1	4.8	12.3	5.2	7.1	5.1	4.1	4.7	8.3	5.0
1978	5.9	5.2	3.5	5.4	9.1	5.4	9.9	5.0	6.9	5.4	8.8	5.5	11.1	5.5	7.4	5.5	4.0	5.8	7.1	5.4
1979	6.7	4.5	4.0	5.7	5.5	5.3	7.3	5.4	5.4	5.9	6.1	5.0	11.1	5.8	8.7	5.2	3.3	5.0	6.3	5.3
1980	8.1	4.9	9.4	5.2	12.1	5.2	16.6	4.9	11.3	5.0	9.9	4.8	13.5	4.5	11.6	5.3	5.8	5.2	10.7	5.0
1981	11.4	4.4	8.7	4.9	11.2	5.4	15.5	4.8	10.0	4.6	11.5	5.0	16.9	4.4	8.8	5.2	5.5	4.7	10.7	4.8
1982	4.4	4.3	4.1	5.3	6.2	4.9	8.9	4.7	3.6	5.6	3.0	4.5	6.9	4.3	6.8	5.4	2.9	4.2	5.0	4.9
1983	1.6	4.7	1.9	4.9	3.1	5.2	2.8	4.9	1.8	5.4	3.6	5.4	5.9	5.3	7.5	5.9	3.8	5.8	3.4	5.3
1984	1.3	5.9	1.5	5.7	2.8	5.3	3.5	5.2	2.3	5.0	3.6	5.1	3.6	4.4	5.8	5.2	4.1	4.8	3.1	5.2
1985	3.5	5.4	4.2	5.3	4.9	6.1	5.8	5.3	5.4	5.5	3.9	5.4	8.9	5.7	12.2	5.3	5.7	6.1	6.0	5.5
1986	3.9	5.9	2.9	5.0	7.1	5.5	5.6	3.8	4.1	4.7	4.9	4.4	8.1	4.9	10.3	5.3	3.8	4.9	5.4	5.0
1987	5.8	6.2	5.0	6.2	8.5	5.8	9.3	5.1	6.3	4.9	4.8	5.6	9.9	5.0	10.5	5.4	5.7	5.4	7.1	5.5
1988	5.3	5.1	5.0	5.6	5.8	6.6	9.7	5.1	4.0	6.1	3.5	5.8	7.8	4.9	8.5	4.9	4.3	5.5	5.7	5.5
1989	3.8	5.2	5.0	5.9	8.2	5.1	10.9	5.3	8.1	5.4	5.5	5.4	6.9	4.6	6.5	5.2	5.5	5.9	6.5	5.4
1990	5.2	5.0	6.9	5.4	9.6	5.4	9.8	4.5	6.6	4.9	3.9	4.7	7.3	4.9	5.8	4.4	4.1	5.2	6.4	4.9
1991	5.8	4.7	6.4	5.4	7.7	5.4	12.5	4.8	7.1	4.3	4.9	5.0	11.5	4.2	7.9	5.1	6.6	5.2	7.5	4.9
1992	4.3	4.0	7.1	5.6	4.6	4.9	6.9	4.4	6.8	4.4	5.7	5.2	5.1	4.1	4.2	3.9	5.6	4.7	5.7	4.6
1993	2.4	4.8	3.4	5.4	2.3	4.9	8.9	5.1	3.8	5.2	3.6	5.4	5.8	4.3	3.7	5.5	4.2	5.2	4.0	5.1
1994	7.5	4.6	11.2	5.5	5.7	4.5	14.2	4.5	9.4	4.8	10.0	5.4	8.9	4.1	6.8	5.4	8.7	5.4	9.1	5.0
1995	4.8	4.6	10.1	5.0	5.7	5.4	8.1	4.5	9.4	4.5	7.4	6.1	7.3	4.6	4.3	5.5	6.1	5.6	7.2	5.1
1996	9.1	4.6	9.6	5.0	4.8	4.5	7.4	4.6	8.5	4.9	8.9	5.6	5.6	4.0	3.7	3.7	4.0	4.8	7.1	4.7
1997	6.8	5.7	9.1	5.1	6.7	5.1	5.9	5.0	8.6	5.1	7.0	5.4	5.7	3.7	3.8	6.9	6.1	6.3	6.8	5.4
1998	14.1	4.2	9.6	4.7	6.7	5.4	6.1	4.7	8.3	4.6	8.8	5.2	4.3	3.2	2.7	4.3	6.3	5.1	7.7	4.6
1999	7.2	4.5	5.5	4.1	3.5	4.6	3.5	4.2	6.1	4.6	4.7	5.8	3.1	3.8	1.9	5.2	4.1	5.9	4.6	4.7
2000	11.3	4.7	5.5	4.9	2.4	4.7	4.7	5.3	8.8	4.2	5.7	5.2	4.4	4.3	3.5	3.7	3.3	5.2	5.8	4.7
2001	3.3	4.6	2.7	4.6	0.9	5.4	1.6	3.2	3.3	4.9	2.9	5.6	2.3	3.8	1.2	4.4	0.7	3.4	2.2	4.5
~~Statistics:~~																				
10 Year Avg.	7.1	4.6	7.4	5.0	4.3	5.0	6.7	4.5	7.3	4.7	6.5	5.5	5.2	4.0	3.6	4.9	4.9	5.2	6.0	4.8
Long-term Avg.	6.1	5.0	6.8	5.4	7.3	5.4	8.2	5.0	7.1	5.2	7.2	5.4	9.7	5.0	6.4	5.4	4.1	5.4	6.8	5.3
~~Percent Change from:~~																				
2000	-71.2	-1.5	-49.8	-5.9	-61.0	14.8	-66.0	-40.3	-61.8	17.7	-49.0	6.5	-48.9	-11.8	-65.1	18.9	-77.8	-34.7	-62.0	-3.4
10 Year Avg.	-53.9	0.2	-62.8	-7.5	-78.3	9.8	-76.2	-29.9	-54.2	3.9	-55.0	1.3	-57.1	-4.7	-66.2	-9.0	-85.2	-34.1	-63.1	-6.5
Long-term Avg.	-46.0	-7.4	-59.8	-14.5	-87.1	0.4	-80.5	-36.2	-53.0	-6.1	-59.6	2.7	-76.8	-23.8	-81.1	-17.6	-82.5	-37.3	-67.6	-13.7

Table 5.3 Mean number of bobwhite quail and white-tailed jackrabbits counted/30-mile route on the August roadside survey, regionally and statewide (1962 - present).

	QUAIL PER ROUTE										JACK-RABBITS
YEAR	NORTH WEST	NORTH CENTRAL	NORTH EAST	WEST CENTRAL	CENTRAL	EAST CENTRAL	SOUTH WEST	SOUTH CENTRAL	SOUTH EAST	STATEWIDE	STATEWIDE
1962	0.00	0.00	0.00	2.22	0.25	0.18	0.88		2.00	0.62	0.45
1963	0.00	0.29	0.08	0.50	0.47	0.13	0.54	5.58	3.20	1.12	0.41
1964	0.00	0.00	0.29	0.64	0.50	0.60	0.83	4.69	4.47	1.39	0.53
1965	0.81	0.04	0.32	0.28	0.25	0.81	2.08	6.76	8.27	2.21	0.35
1966	0.22	0.00	0.12	0.11	0.44	3.05	2.58	6.65	7.59	2.29	0.35
1967	0.38	0.00	0.16	0.56	0.20	1.81	2.17	5.48	8.09	2.10	0.60
1968	0.00	0.00	0.28	0.17	0.65	2.68	3.46	5.81	5.55	2.06	0.28
1969	0.00	0.00	0.00	0.06	1.68	3.00	6.83	8.58	5.40	2.60	0.31
1970	0.00	0.00	0.00	0.00	0.17	1.64	10.75	10.15	7.36	2.95	0.15
1971	0.00	0.00	0.00	0.06	0.52	1.35	11.42	6.82	6.79	2.64	0.35
1972	0.00	0.00	0.00	0.26	0.25	1.13	10.27	6.84	3.80	2.26	0.30
1973	0.00	0.00	0.00	0.21	1.24	1.29	13.31	6.58	5.55	2.54	0.20
1974	0.00	0.00	0.11	0.25	0.13	1.00	8.07	6.39	5.13	2.11	0.07
1975	0.00	0.00	0.00	2.00	0.30	0.92	7.64	3.78	5.64	1.98	0.11
1976	0.00	0.00	2.00	2.21	0.16	2.04	2.40	7.39	4.68	2.19	0.11
1977	0.00	0.00	0.41	0.21	0.68	1.55	5.40	12.63	3.96	2.69	0.08
1978	0.00	0.00	1.06	1.37	0.17	0.50	2.73	8.42	3.40	1.87	0.14
1979	0.04	0.00	0.88	0.00	0.35	0.32	2.75	2.00	0.30	0.66	0.16
1980	0.36	0.00	0.00	0.68	1.39	1.00	5.27	7.88	2.61	2.05	0.15
1981	0.40	0.00	1.00	0.21	0.10	1.64	7.00	11.84	2.43	2.60	0.31
1982	0.00	0.00	0.67	0.05	0.00	0.14	0.87	2.64	2.83	0.79	0.10
1983	0.08	0.08	0.28	0.16	0.50	0.57	1.64	7.32	1.87	1.44	0.05
1984	0.00	0.00	0.22	0.80	0.03	0.00	1.13	2.40	1.57	0.66	0.08
1985	0.00	0.00	1.44	0.00	0.10	0.00	1.27	6.24	3.30	1.37	0.07
1986	0.00	0.00	0.00	0.37	0.03	0.14	1.73	8.16	2.09	1.42	0.12
1987	0.00	0.00	0.33	0.47	0.00	0.74	3.93	14.52	4.17	2.70	0.12
1988	0.00	0.00	0.44	0.94	0.00	0.00	4.87	8.46	4.13	1.96	0.17
1989	0.04	0.00	0.33	1.06	0.10	0.70	6.07	7.67	3.17	1.91	0.22
1990	0.00	0.00	1.00	0.72	0.13	1.04	2.93	6.25	2.21	1.48	0.19
1991	0.08	0.00	0.47	0.72	0.13	0.52	3.13	5.54	2.33	1.34	0.07
1992	0.12	0.00	0.22	1.50	0.07	0.96	2.43	2.83	2.71	1.07	0.14
1993	0.00	0.00	0.37	0.50	0.03	0.78	5.07	2.13	1.61	0.96	0.03
1994	0.08	0.00	0.00	0.65	0.00	0.87	9.19	3.21	3.04	1.58	0.15
1995	0.08	0.00	0.63	0.17	0.06	0.86	2.53	5.54	3.22	1.37	0.06
1996	0.08	0.00	0.21	0.28	0.09	0.71	2.73	0.88	0.65	0.51	0.09
1997	0.00	0.00	0.00	0.00	0.07	1.24	4.27	2.25	0.50	0.77	0.10
1998	0.00	0.00	0.00	0.00	0.07	1.48	1.20	2.30	1.81	0.72	0.09
1999	0.00	0.00	0.05	0.00	0.00	0.13	1.07	2.50	1.50	0.57	0.06
2000	0.00	0.00	0.00	0.20	0.47	0.17	4.40	0.83	0.41	0.57	0.03
2001	0.00	0.00	0.00	0.00	0.09	0.76	1.31	0.50	0.32	0.29	0.05
Statistics:											
10 Year Avg.	0.04	0.00	0.15	0.33	0.10	0.80	3.42	2.30	1.58	0.84	0.08
Long-term Avg.	0.07	0.01	0.33	0.51	0.30	0.96	4.20	5.81	3.49	1.61	0.19
Percent Change from:											
2000	0.0	0.0	0.0	-100.0	-80.0	337.9	-70.2	-40.0	-22.2	-49.4	82.8
10 Year Avg.	-100.0	0.0	-100.0	-100.0	-1.1	-4.4	-61.6	-78.2	-79.8	-66.0	-34.1
Long-term Avg.	-100.0	-100.0	-100.0	-100.0	-68.3	-20.7	-68.8	-91.4	-90.9	-82.2	-71.4

Table 5.4 Mean number of gray partridge counted/30-mile route on the August roadside survey, regionally and statewide, (1963-present). Approximately 20 routes were added statewide in 1972.

YEAR	NORTH WEST	NORTH CENTRAL	NORTH EAST	WEST CENTRAL	CENTRAL	EAST CENTRAL	SOUTH WEST	SOUTH CENTRAL	SOUTH EAST	STATEWIDE
1962	6.27	0.82	0.00	1.00	0.08	0.00	0.00		0.00	1.13
1963	4.67	2.71	0.00	0.69	0.00	0.00	0.00	0.00	0.00	0.92
1964	4.93	2.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85
1965	2.38	1.52	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.48
1966	2.70	4.96	0.00	0.00	0.76	0.00	0.00	2.05	0.00	1.30
1967	3.33	1.13	0.00	1.11	0.20	0.00	0.00	0.00	0.00	0.66
1968	4.13	1.30	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.68
1969	1.25	1.14	0.00	0.17	0.32	0.00	0.00	0.00	0.00	0.38
1970	8.43	4.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	1.66
1971	7.09	3.55	0.00	0.29	0.00	0.00	0.00	0.00	0.00	1.44
1972	8.92	5.44	0.00	0.47	0.61	0.00	0.00	0.00	0.20	1.92
1973	6.57	7.08	0.22	0.32	0.52	0.00	0.00	0.00	0.00	1.87
1974	9.00	4.79	0.00	0.30	0.33	0.00	0.00	0.00	0.00	1.82
1975	8.50	6.73	0.00	0.00	0.19	0.00	0.00	0.00	0.00	1.98
1976	9.50	7.20	0.00	0.84	0.23	0.00	0.00	0.00	0.00	2.14
1977	22.04	13.88	0.00	1.58	0.55	0.00	0.00	0.00	0.00	4.70
1978	17.23	7.68	0.11	1.42	2.43	0.00	0.00	0.00	0.00	3.73
1979	20.28	19.32	0.18	1.58	2.90	0.77	0.00	0.00	0.00	5.59
1980	35.04	28.08	0.11	3.00	4.03	0.82	0.00	0.00	0.00	8.81
1981	31.44	23.60	1.78	5.00	4.19	0.32	0.00	0.00	0.00	8.08
1982	18.48	10.16	0.94	3.37	1.87	0.00	0.00	0.00	0.00	4.21
1983	8.04	8.88	0.72	1.84	1.87	0.65	0.00	0.00	0.00	2.65
1984	14.16	13.24	2.11	1.05	3.03	1.05	0.00	0.00	0.00	4.22
1985	26.84	25.23	8.06	10.68	9.26	1.18	0.00	0.00	0.00	9.75
1986	29.48	21.04	10.00	5.79	11.13	2.41	0.13	0.00	0.00	9.62
1987	36.88	35.08	10.56	17.00	20.32	3.17	0.00	0.00	0.61	14.93
1988	42.84	48.65	15.61	17.83	25.07	4.48	0.20	0.38	1.39	19.00
1989	36.54	31.82	14.39	12.06	37.48	0.96	2.07	0.38	0.70	17.27
1990	18.40	20.12	16.68	5.89	6.93	5.52	1.00	0.38	0.88	8.75
1991	13.88	7.52	4.16	3.17	4.23	4.00	0.87	0.54	0.58	4.59
1992	5.15	4.76	6.67	2.61	3.77	4.17	0.07	1.46	2.05	3.58
1993	1.33	1.39	0.84	2.00	1.19	0.17	0.00	0.13	0.17	0.85
1994	7.92	14.48	4.47	10.41	8.29	5.39	0.13	0.29	0.35	6.17
1995	3.72	4.86	4.11	1.28	2.52	3.18	0.00	0.29	0.78	2.47
1996	4.42	6.64	3.00	2.61	1.81	1.24	0.00	0.00	0.00	2.37
1997	9.00	7.33	6.47	3.16	10.77	3.95	0.00	0.00	0.36	5.10
1998	23.00	13.96	9.17	3.58	3.36	1.24	0.07	0.00	0.05	6.42
1999	11.41	2.75	2.11	1.84	3.68	0.52	0.00	0.00	0.09	2.83
2000	6.54	4.75	0.90	2.05	4.00	1.74	0.00	0.00	0.00	2.53
2001	3.23	1.30	3.44	2.75	3.94	1.33	0.13	0.00	0.00	1.90
Statistics:										
10 Year Avg.	7.6	6.2	4.1	3.2	4.3	2.3	0.0	0.2	0.4	3.4
Long-term Avg.	13.4	10.8	3.2	3.2	4.6	1.2	0.1	0.2	0.2	4.5
Percent Change from:										
2000	-50.6	-72.7	284.8	34.1	-1.6	-23.3	0.0	0.0	0.0	-24.8
10 Year Avg.	-57.3	-79.2	-16.4	-14.8	-9.1	-41.9	221.8	-100.0	-100.0	-44.4
Long-term Avg.	-75.8	-88.0	8.6	-14.7	-13.7	10.5	7.4	-100.0	-100.0	-57.6

Table 5.5 Mean number of cottontail rabbits counted/30-mile route on the August roadside survey, regionally and statewide, (1962-present).

YEAR	NORTH WEST	NORTH CENTRAL	NORTH EAST	WEST CENTRAL	CENTRAL	EAST CENTRAL	SOUTH WEST	SOUTH CENTRAL	SOUTH EAST	STATEWIDE
1962	3.6	1.5	4.3	10.1	5.3	6.2	6.0		5.6	5.2
1963	8.9	4.8	4.2	10.8	5.0	6.9	8.0	9.9	12.7	7.9
1964	2.3	2.3	1.7	11.1	6.6	3.1	10.2	19.4	13.7	7.9
1965	3.1	3.0	3.7	7.9	2.8	4.0	16.2	24.3	11.2	8.1
1966	2.0	3.2	6.5	9.7	5.9	5.0	30.2	31.7	9.5	10.3
1967	2.8	2.4	4.4	6.9	6.1	4.0	18.8	16.3	10.9	7.5
1968	1.9	3.3	4.0	6.9	5.3	5.7	17.7	17.5	8.5	7.4
1969	2.0	2.2	5.0	3.4	2.5	5.6	16.6	18.0	6.8	6.3
1970	1.4	2.0	4.3	2.7	1.7	3.6	12.5	11.3	4.7	4.4
1971	1.9	1.4	3.9	3.7	2.8	4.2	14.8	16.5	5.6	5.4
1972	2.8	1.7	2.7	3.9	2.3	6.4	11.7	14.8	4.7	5.5
1973	2.2	2.6	3.7	3.9	4.2	6.0	13.8	14.3	6.1	5.8
1974	2.1	1.9	4.4	3.6	2.0	3.9	5.8	8.4	6.0	4.1
1975	1.3	1.2	2.5	2.6	1.4	3.6	5.1	7.0	5.2	3.2
1976	1.3	1.6	5.9	7.3	4.2	5.5	9.3	16.4	8.9	6.4
1977	1.4	1.2	4.0	2.2	1.9	5.1	7.9	11.7	5.4	4.3
1978	3.8	2.0	6.9	4.7	3.7	5.5	12.7	14.0	5.2	6.2
1979	3.2	1.7	3.3	4.1	2.7	2.3	5.6	8.2	2.5	3.6
1980	2.3	3.0	2.1	4.2	4.2	1.8	5.5	9.8	4.9	4.2
1981	3.4	4.6	6.4	5.2	3.2	7.4	11.1	21.1	9.0	7.8
1982	2.4	2.3	2.7	4.4	2.5	4.9	7.7	19.5	11.7	6.4
1983	3.1	2.5	6.4	4.2	3.1	5.0	7.2	17.6	12.7	6.8
1984	2.0	1.4	3.0	4.2	2.6	4.0	3.5	14.7	14.0	5.6
1985	3.2	2.7	3.9	3.8	4.4	5.5	7.1	22.9	12.0	7.4
1986	3.0	2.6	4.6	4.3	3.8	3.8	9.7	25.2	12.7	7.7
1987	4.1	3.5	3.2	6.3	4.4	4.3	8.1	34.4	7.7	8.6
1988	3.1	1.8	2.0	4.8	2.6	2.5	4.6	12.8	6.7	4.5
1989	2.4	2.4	4.6	5.2	2.9	4.3	6.3	13.5	8.5	5.4
1990	2.7	3.9	7.0	7.7	5.5	7.3	9.2	26.0	14.7	9.2
1991	2.4	1.8	3.4	5.1	2.5	3.3	7.0	16.3	9.1	5.5
1992	2.6	3.8	4.0	4.8	4.1	3.6	7.1	13.7	12.4	6.0
1993	1.3	1.8	3.9	6.5	2.2	5.0	6.7	15.4	10.1	5.5
1994	2.2	1.9	5.4	5.4	3.3	7.4	8.9	14.4	10.4	6.3
1995	3.2	4.0	3.8	5.5	4.8	6.5	13.0	15.7	9.5	7.0
1996	3.6	3.7	5.8	5.2	3.7	6.3	6.4	13.8	8.5	6.2
1997	2.1	2.4	5.2	2.9	3.4	6.2	6.0	11.8	5.1	4.9
1998	2.0	2.7	5.1	3.1	3.7	6.3	5.8	10.4	7.5	5.1
1999	4.1	2.3	5.1	5.0	4.7	9.1	7.9	10.6	6.0	5.9
2000	2.4	2.0	4.9	4.2	4.9	6.9	7.4	19.3	7.2	6.4
2001	1.6	1.6	1.3	2.1	3.0	3.5	5.3	12.0	4.1	3.8
Statistics:										
10 Year Avg.	2.5	2.6	4.5	4.5	3.8	6.1	7.5	13.7	8.1	5.7
Long-term Avg.	2.7	2.5	4.2	5.1	3.6	5.0	9.7	16.2	8.5	6.2
Percent Change from:										
2000	-34.9	-20.4	-73.1	-49.4	-38.2	-48.7	-29.1	-37.4	-43.4	-40.8
10 Year Avg.	-37.2	-39.2	-70.1	-52.9	-19.9	-42.0	-29.6	-12.1	-49.4	-33.4
Long-term Avg.	-40.6	-36.1	-68.5	-58.9	-15.9	-29.6	-45.9	-25.5	-51.9	-38.3

Table 5.6 Small game harvest estimates from the Iowa small-game survey (1963-present).

YEAR	PHEASANT	QUAIL	COTTON-TAIL	JACK-RABBIT	SQUIRREL	HUNS	RUFFED GROUSE	DUCKS	CANADA GEESE	OTHER GEESE	RACCOON	FOX	COYOTE
1963	1,935,000	327,977	2,066,472	75,015	1,440,576	8,000					347,168	121,124	
1964	1,737,400	291,030	2,260,090	97,785	1,111,290	7,000		434,590	27,575		268,560	91,550	
1965	1,117,500	513,760	1,602,060	133,000	1,236,400	11,500		394,680	55,660		254,360	88,330	
1966	1,449,400	1,051,630	2,180,525	91,690	1,370,250	12,000		594,605	62,075		301,600	113,100	
1967	1,212,200	736,520	1,548,035	55,660	1,196,810	11,300		525,060	58,725		301,725	68,475	
1968	1,393,900	777,685	1,761,370	62,405	1,014,940	21,600		244,075	49,410		349,600	177,155	
1969	1,642,899	1,144,700	1,722,280	98,930	1,164,030	20,900	2,110	558,950	116,020		300,630	142,100	
1970	1,788,500	1,178,685	1,725,535	71,705	1,115,410	28,300	4,085	554,283	79,427		281,890	60,000	6,000
1971	1,817,000	1,037,957	1,305,083	41,468	1,172,742	31,100	3,880	560,770	87,300		617,990	45,450	6,800
1972	1,396,900	657,300	1,148,100	31,200	1,048,000	16,800	8,500	597,500	9,100	50,100	374,600	66,100	19,400
1973	1,905,086	791,242	1,424,927	30,863	1,105,271	45,284		358,955	9,823	51,051	524,496	81,344	32,408
1974	1,672,500	727,300	1,271,600	36,900	1,119,000	35,300		374,500	79,800				
1975	1,230,100	544,000	996,200	19,000	1,046,600	26,400					557,500	32,500	23,800
1976	1,425,500	1,080,500	1,136,300	20,700	1,377,500	54,800	24,400	846,300	71,100		635,400	56,800	34,800
1977	1,357,862	849,183	1,322,263	19,975	1,283,043	48,991	17,022	721,824	50,228		539,000	53,426	37,547
1978	1,428,708	660,625	856,999	26,077	815,562	108,473	9,166	701,014	23,391	40,791	396,616	60,539	28,195
1979	1,200,709	312,410	461,285	13,713	696,363	55,414	7,717	848,849	27,646	60,239	425,528	25,544	36,231
1980	1,429,617	524,450	588,363	7,932	844,999	70,764	17,305	543,282	13,984	30,149	310,414	30,825	21,401
1981	1,447,969	563,569	1,134,781	22,860	949,681	69,698	23,940	543,541	26,532	44,376	320,934	50,021	33,660
1982	972,556	302,648	712,227	5,237	759,438	52,782	9,279	659,172	25,842	24,427	381,616	43,259	31,774
1983	1,047,027	270,690	720,012	8,845	669,490	91,035	5,894	591,483	21,350	16,230	257,105	59,048	36,022
1984	724,192	190,708	636,209	6,376	529,316	33,306	13,308	626,868	29,975	31,174	295,650	22,215	25,268
1985	852,716	189,236	717,631	2,108	673,665	62,931	8,336	362,951	23,167	22,399	"------Discontinued------"		
1986	855,894	339,000	472,585	6,082	506,769	60,018	12,701	412,571	26,960	19,086			
1987	1,412,082	397,633	690,091	8,830	532,001	109,061	5,254	300,159	20,597	23,204			
1988	1,139,599	289,592	424,561	3,907	510,065	104,094	13,039	132,514	32,400	16,023			
1989	1,441,990	426,302	435,791	3,025	583,183	118,282	13,335	183,990	28,967	12,373			
1990	1,407,002	321,493	608,805	4,463	466,140	147,922	9,338	173,006	25,592	11,375			
1991	1,138,463	231,818	437,144	3,171	407,172	45,541	5,764	206,938	42,099	12,288			
1992	925,123	179,825	311,607	2,113	328,644	37,328	3,794	242,395	54,160	16,350			
1993	1,226,010	201,461	334,667	3,212	439,477	24,577	1,606	190,800	49,716	19,075			
1994	1,245,580	178,589	288,982	262	395,232	22,331	2,189	190,122	33,349	5,013			
1995	1,443,010	220,999	335,862	6,280	377,714	6,677	2,630	374,490	79,256	14,670			
1996	1,367,060	81,039	331,047	2,666	302,908	36,358	3,011	313,134	83,218	12,786			
1997	1,340,050	181,025	340,661	5,063	265,874	38,045	3,402	371,746	123,029	27,356			
1998	1,237,980	100,594	255,149	10,008	319,081	25,613	0	535,949	79,101	14,564			
1999[a]	899,174	110,128	237,409	8,777	242,224	20,200	1,373	"------Discontinued------"					
2000[b]	1,001,867	140,828	350,739	1,626	217,116	19,258	489						
2001	470,116	32,226	196,483	3,840	248,833	5,814	903						
Statistics:													
10 Year Avg.	1,115,597	142,671	298,261	4,385	313,710	23,620	1,940						
Long-term Avg.	1,300,929	465,548	906,408	26,994	766,226	44,738	7,792	449,149	47,840	25,004	382,971	70,900	26,665
Percent Change from:													
2000	-53.1	-77.1	-44.0	136.2	14.6	-69.8	84.7						
10 Year Avg.	-57.9	-77.4	-34.1	-12.4	-20.7	-75.4	-53.4						
Long-term Avg.	-63.9	-93.1	-78.3	-85.8	-67.5	-87.0	-88.4						

[a] Small Game Harvest Survey changed from a single to a double mailing. Harvest estimates from 1999-present are more conservative than pre-1999 estimates.

[b] Survey methodology changed account for unrealistic harvest (e.g. reports of 1 bird harvested for 60 days effort).

Table 5.7 Mean number of hens with broods and hens without broods counted/30-mile route on the Iowa August roadside survey, regionally and statewide, (1962 - present). Severe winter weather preceded the August counts in 1965, 69,75,79, and 82. Abnormally wet weather occurred during the 83, 84, 93, and 99 nesting seasons.

	NORTH WEST		NORTH CENTRAL		NORTH EAST		WEST CENTRAL		CENTRAL		EAST CENTRAL		SOUTH WEST		SOUTH CENTRAL		SOUTH EAST		STATEWIDE	
	HENS W/O	HENS WITH	HENS W/O	HENS WITH	HENS W/O	HENS WITH	HENS W/O	HENS WITH	HENS W/O	HENS WITH	HENS W/O	HENS WITH	HENS W/O	HENS WITH	HENS W/O	HENS WITH	HENS W/O	HENS WITH	HENS W/O	HENS WITH
YEAR	BROODS	BROODS	BROODS	BROODS	BROODS	BROODS	BROODS	BROODS	BROODS	BROODS	BROODS	BROODS	BROODS	BROODS	BROODS	BROODS	BROODS	BROODS	BROODS	BROODS
1962	4.5	9.5	4.8	10.2	2.9	9.0	2.3	7.7	3.3	7.0	1.1	2.8	1.0	3.9			1.8	0.8	2.8	6.5
1963	7.9	15.7	15.9	13.8	5.0	10.6	4.6	8.6	2.2	5.6	1.7	4.7	1.6	11.2	0.8	1.8	1.1	1.7	4.5	8.1
1964	7.9	10.4	6.4	14.4	2.1	20.1	3.7	10.4	2.8	4.8	1.5	5.5	2.3	7.5	0.8	2.2	1.9	1.5	3.4	7.8
1965	2.2	5.2	3.1	7.0	3.7	4.6	3.2	7.4	3.4	3.3	3.3	4.1	4.7	9.8	1.5	4.5	1.4	1.9	2.9	5.0
1966	2.2	4.7	3.3	8.7	4.5	6.9	2.7	5.7	3.1	4.7	3.9	7.0	7.4	15.8	2.9	3.9	1.2	1.3	3.2	6.0
1967	2.3	3.2	6.1	6.0	5.1	6.5	4.9	4.8	4.5	5.8	4.4	6.8	5.6	12.3	2.0	4.9	1.9	2.0	4.0	5.5
1968	2.5	4.5	4.8	5.8	4.9	5.6	3.0	5.8	2.7	5.7	2.4	7.1	5.8	13.3	1.6	3.6	1.0	1.5	3.0	5.5
1969	1.4	1.8	2.9	4.4	2.0	6.4	2.1	4.0	2.9	5.6	2.1	6.9	5.3	8.6	1.2	4.7	1.4	2.3	2.2	4.7
1970	1.3	4.3	2.2	5.5	2.9	6.6	2.9	5.3	1.9	10.0	4.1	9.9	3.1	11.7	1.8	5.3	1.3	3.6	2.3	6.7
1971	1.8	3.1	2.5	5.1	2.6	6.1	3.1	6.3	2.3	9.4	3.9	11.6	4.8	9.6	1.7	4.4	2.2	4.9	2.6	6.5
1972	2.0	3.9	2.7	4.9	3.7	7.1	2.8	6.3	3.7	8.3	4.9	10.0	3.9	11.6	2.9	5.9	1.9	3.0	3.1	6.5
1973	3.2	5.0	2.7	6.8	3.4	7.7	5.1	7.1	4.9	9.6	7.3	11.1	3.1	8.1	2.2	5.2	1.7	3.2	3.8	7.2
1974	3.2	5.3	3.8	6.1	4.3	5.8	5.4	6.7	5.9	3.8	5.0	6.7	4.4	9.1	2.4	5.3	1.7	1.9	4.0	5.5
1975	0.5	1.3	1.3	3.3	2.8	6.1	1.7	3.3	2.7	4.8	3.8	7.4	1.7	5.0	1.3	4.2	1.0	3.0	1.9	4.2
1976	0.7	1.5	2.0	4.9	4.7	8.4	2.2	5.1	3.2	6.0	5.1	10.0	2.5	7.0	1.7	3.8	2.3	3.5	2.7	5.5
1977	1.1	2.7	1.2	5.0	2.1	9.1	0.9	4.8	4.2	6.1	4.0	9.7	1.9	6.1	2.0	3.3	1.2	2.6	2.1	5.3
1978	1.4	3.7	1.0	2.8	2.3	7.8	3.0	5.8	3.0	5.5	3.1	6.7	1.3	6.4	1.7	3.8	1.7	2.9	2.1	4.9
1979	1.7	4.6	1.1	2.8	3.1	4.9	2.4	4.8	1.0	3.2	1.7	5.0	2.1	6.9	1.8	4.3	1.0	2.3	1.7	4.1
1980	2.6	5.3	2.8	6.2	2.8	9.4	2.9	10.5	3.6	8.6	2.4	8.2	4.5	7.7	2.4	5.8	0.9	3.8	2.7	7.1
1981	3.1	8.0	2.2	5.4	3.3	9.6	2.9	10.0	2.9	6.8	3.3	9.9	4.5	10.7	2.4	6.4	1.4	3.6	2.8	7.5
1982	1.4	2.8	1.4	3.2	1.5	5.1	2.4	6.3	1.0	2.3	1.5	2.3	2.2	5.0	1.2	5.4	1.2	2.5	1.5	3.7
1983	0.9	0.8	0.8	1.1	1.3	2.0	1.3	1.8	0.6	1.5	1.0	2.7	2.3	5.1	2.0	6.1	1.3	2.8	1.2	2.5
1984	0.3	0.9	0.7	0.8	1.2	1.9	0.8	2.0	0.7	1.5	1.0	2.9	0.7	2.1	1.9	4.8	0.9	2.7	0.9	2.2
1985	0.4	1.8	1.0	2.4	1.1	2.8	1.2	4.0	0.9	2.8	1.0	2.7	0.9	5.5	1.2	6.3	0.8	3.9	0.9	3.5
1986	0.5	2.2	1.0	1.8	1.4	4.2	0.8	3.3	1.1	2.5	1.3	3.5	1.7	4.5	2.0	6.5	1.8	2.9	1.3	3.4
1987	1.1	3.0	1.0	3.4	1.6	3.6	1.1	6.1	1.4	4.4	1.3	3.2	1.3	5.9	2.2	6.1	1.4	3.6	1.4	4.2
1988	1.1	3.2	0.8	3.0	2.3	4.4	1.4	5.1	0.8	2.8	1.4	2.3	1.5	5.3	1.2	5.2	1.7	3.1	1.3	3.7
1989	0.8	2.9	1.4	3.5	0.9	6.4	2.5	7.1	1.4	5.6	1.0	3.5	1.1	4.5	1.3	4.0	1.7	4.2	1.3	4.5
1990	1.6	4.0	2.2	5.4	2.3	7.2	3.0	6.8	2.8	5.4	2.2	2.5	1.6	5.2	1.2	3.3	1.4	3.0	2.0	4.6
1991	1.9	4.4	2.0	5.0	2.5	5.2	2.7	7.9	2.0	4.5	2.7	3.2	3.1	6.9	1.3	5.4	0.9	4.8	2.0	5.1
1992	1.3	3.2	1.7	5.3	1.8	3.2	3.6	4.7	2.5	4.6	1.9	4.1	3.9	3.9	1.1	3.4	1.7	3.6	2.0	4.1
1993	0.8	1.5	1.3	2.1	0.9	1.4	1.4	6.1	0.8	2.8	1.4	2.3	1.2	4.2	0.6	2.3	0.7	3.0	1.0	2.7
1994	0.8	5.8	2.5	7.3	1.2	3.9	4.1	9.2	2.0	6.3	3.1	8.0	1.8	5.0	1.1	5.0	2.3	7.0	2.1	6.4
1995	1.2	3.2	2.2	7.6	1.2	3.8	2.5	4.9	1.9	6.6	2.6	5.5	1.6	5.8	0.5	3.0	1.6	4.8	1.7	5.1
1996	1.9	7.0	2.7	7.7	1.8	3.8	2.9	6.0	2.2	5.8	1.9	7.1	1.4	4.1	1.3	2.5	1.6	3.4	2.0	5.4
1997	1.6	4.3	2.0	7.1	1.2	5.2	1.7	3.8	2.5	7.1	2.4	5.0	1.4	4.4	1.0	2.2	1.3	4.2	1.7	5.0
1998	1.9	7.3	2.1	6.6	1.7	4.9	1.2	4.3	2.4	5.8	1.5	5.4	1.6	2.0	0.9	1.5	2.6	4.8	1.8	4.9
1999	3.2	5.5	2.8	3.9	0.8	2.8	1.1	2.3	1.9	4.5	2.5	4.0	0.6	2.2	0.4	1.5	1.0	2.9	1.7	3.5
2000	3.6	7.3	2.9	4.0	0.8	1.7	1.8	3.3	2.1	6.3	2.6	4.4	1.2	3.1	1.0	2.5	0.7	2.4	2.0	4.1
2001	1.8	2.6	0.5	1.9	0.2	0.6	0.4	1.1	0.6	2.4	1.2	1.9	0.7	1.2	0.4	0.7	0.5	0.4	0.7	1.5
Statistics:																				
10 Year Avg.	1.8	4.8	2.1	5.4	1.2	3.1	2.0	4.6	1.9	5.2	2.1	4.8	1.5	3.6	0.8	2.4	1.4	3.6	1.7	4.3
Long-term Avg.	2.0	4.4	2.6	5.3	2.4	5.8	2.5	5.7	2.4	5.2	2.6	5.7	2.6	6.7	1.5	4.1	1.4	3.0	2.2	5.0
Percent Change from:																				
2000	-48.9	-64.4	-83.2	-51.9	-73.6	-67.0	-77.1	-67.7	-70.6	-61.6	-53.6	-57.0	-42.7	-62.1	-60.0	-71.2	-33.3	-82.7	-63.1	-63.1
10 Year Avg.	2.1	-45.2	-76.7	-64.0	-81.1	-82.2	-80.5	-77.0	-67.1	-53.3	-43.5	-60.1	-55.2	-66.9	-50.0	-71.0	-67.5	-88.8	-56.8	-64.3
Long-term Avg.	-9.3	-41.0	-81.8	-63.7	-90.7	-90.4	-83.9	-81.4	-74.0	-53.5	-54.3	-66.5	-73.3	-82.3	-72.3	-82.8	-67.9	-86.5	-67.3	-69.6

Table 5.8 Sales of hunting-related licenses and stamps in Iowa (1942-present).

YEAR[a]	FUR-HARVEST over 16	RESIDENT HUNTING	RESIDENT COMBINATION	FUR, FISH, GAME	TOTAL RESIDENT LICENSE[b]	LIFETIME HUNTING +65	NR HUNTING over 18	NR HUNTING under 18	TOTAL NR LICENSE[c]
1942		118,252	107,794		226,046				447
1943		84,671	108,599		193,270				612
1944		94,361	117,296		211,657				1,163
1945		105,651	139,958		245,609				998
1946		133,284	192,844		326,128				1,646
1947		121,200	152,042		273,242				632
1948		173,297	158,722		332,019				1,727
1949		193,280	156,454		349,734				2,256
1950		187,079	151,032		338,111				2,393
1951		187,838	141,482		329,320				2,371
1952		190,669	150,266		340,935				2,391
1953		192,026	151,956		343,982				3,115
1954		196,327	150,108		346,435				3,203
1955		214,210	155,283		369,493				3,936
1956		217,095	147,890		364,985				4,544
1957		175,256	164,133		339,389				4,422
1958		211,742	143,916		355,658				5,521
1959		179,564	140,682		320,246				4,535
1960		174,924	138,927		313,851				5,352
1961		167,519	134,290		301,809				5,448
1962		174,319	113,768		288,087				5,470
1963		194,962	112,513		307,475				7,531
1964		189,060	112,904		301,964				8,370
1965		165,063	110,577		275,640				6,505
1966		174,904	117,841		292,745				9,638
1967		169,819	125,457		295,276				11,244
1968		184,345	125,079		309,424				12,223
1969		166,857	136,745		303,602				17,326
1970		174,074	148,435		322,509				21,898
1971		171,530	157,012		328,542				30,264
1972		159,145	118,172		277,317				28,559
1973		173,764	117,991		291,755				34,497
1974		173,049	145,881		318,930				42,224
1975		162,612	139,824		302,436				36,382
1976		164,434	142,055		306,489				41,849
1977		164,496	132,444		296,940				39,032
1978		161,295	134,401		295,696				32,848
1979	17,602	148,341	109,335		257,676				27,302
1980	19,366	161,596	105,059		266,655				30,793
1981	19,116	158,551	107,502		266,053				31,379
1982	17,505	139,044	106,925		245,969				24,002
1983	14,964	134,140	103,711		237,851				23,206
1984	14,537	120,341	101,178		221,519				21,927
1985	25,156	118,163	90,281		208,444				22,977
1986	23,646	121,640	83,653	63	205,356				27,254
1987	20,689	134,155	78,285	8,234	220,674				35,676
1988	13,406	130,547	77,342	10,699	218,588				35,023
1989	8,976	134,894	81,795	9,435	226,124				40,197
1990	6,059	131,601	80,241	7,794	219,636				41,500
1991	6,417	127,432	81,977	7,791	217,200				45,792
1992	6,851	142,059	54,028	7,421	203,508				39,211
1993	6,611	137,489	52,416	8,061	197,966				29,231
1994	7,477	148,770	54,185	8,334	211,289				45,610
1995	6,480	146,497	55,367	8,863	210,727				48,028
1996	8,132	137,724	62,834	9,105	209,663				53,058
1997	8,208	135,010	66,398	10,122	211,530				52,730
1998	7,664	133,000	65,129	10,661	208,790				50,511
1999	"----------Discontinued----------"				***206,210***	***2,885***	***42,379***	***2,086***	***44,465***
2000					200,995	1,642	39,067	1,901	40,968
2001					194,051	1,515	26,748	1,090	27,838
~~Statistics:~~									
10 Year Avg.					205,473	2,014	36,065	1,692	43,165
Long-term Avg.					273,387	2,014	36,065	1,692	21,354

Table 5.8 Sales of hunting-related licenses and stamps in Iowa (1942-present).

YEAR[a]	HABITAT STAMP[d]	IOWA DUCK STAMP[e]	FUR-HARVEST over 16[f]	FUR-HARVEST under 16	TOTAL FUR-HARVEST[g]	HUNT PRESERVE[h]
1972		70,446				
1973		67,323				
1974		70,797				
1975		70,814				
1976		66,120				
1977		69,023				
1978		67,041				
1979	279,621	52,865	17,602	4,813	22,415	768
1980	296,667	50,202	19,366	5,529	24,895	822
1981	297,297	45,751	19,116	4,990	24,106	742
1982	269,290	44,391	17,505	4,248	21,753	751
1983	261,340	42,981	14,964	3,699	18,663	766
1984	243,154	44,445	14,537	3,329	17,866	696
1985	233,779	37,681	25,156	3,519	28,675	729
1986	236,219	40,157	23,709	3,064	26,773	882
1987	259,350	43,357	28,923	3,338	32,261	1,112
1988	257,702	34,799	24,105	2,380	26,485	1,696
1989	271,342	32,920	18,411	1,530	19,941	1,499
1990	263,530	31,468	13,853	973	14,826	1,786
1991	266,845	32,537	14,208	719	14,927	1,454
1992	247,673	34,304	14,272	793	15,065	1,810
1993	232,298	31,741	14,672	829	15,501	2,137
1994	260,815	33,232	15,811	952	16,763	1,870
1995	263,531	34,903	15,343	903	16,246	2,467
1996	265,653	43,060	17,237	1,021	18,258	2,317
1997	269,443	38,275	18,330	1,066	19,396	2,516
1998	266,519	40,349	18,325	1,078	19,403	3,107
1999**	***253,943***	***42,588***	***15,804***	***1,004***	***16,808***	***2,772***
2000	245,351	40,913	12,793	1,936	14,729	2,898
2001	237,407	40,378	14,665	658	15,323	2,963
~~Statistics~~:						
10 Year A	254,263	37,974	15,725	1,024	16,749	2,486
Long-term	259,946	46,495	17,770	2,277	20,047	1,677

[a] Change to ELSI electronic licensing system in 1999. First four license types modified or eliminated under ELSI.

[b] Total resident licenses is sum of resident hunt, resident combination, and fur/fish/game, until ELSI system implementation in 1999.

[c] Total NR licenses combines NR over and under 18 sales after 1999 ELSI implementation for comparisons to previous years.

[deh] Totals combine resident and non-resident sales.

[f] Furharvester (over 16) sales combines discontinued furharvester (over 16) and fur/fish/game licenses, until ELSI system implementation in 1999.

[g] Total furharvester licenses sales is the sum of the furharvester over and under 16 sales columns. Total does not include non-resident sales.

Table 5.9 Estimated hunter numbers from the Iowa small-game survey (1963-present). Prior to 1978 Canada geese = all geese.

YEAR	PHEASANT	QUAIL	COTTON-TAIL	JACK-RABBIT	SQUIRREL	HUNS	RUFFED GROUSE	DUCKS	CANADA GEESE	OTHER GEESE	RACCOON	FOX	COYOTE
1963	277,400	47,028	169,994	30,494	150,932						26,745	54,135	
1964	271,285	46,535	179,585	31,815	136,415			55,270	9,225		27,975	58,685	
1965	225,735	46,450	138,379	26,080	123,640			50,225	26,250		17,420	40,150	
1966	240,400	63,785	154,647	20,355	130,500			63,265	31,340		23,200	43,500	
1967	244,300	62,485	150,050	20,615	138,520			64,900	32,450		21,400	48,910	
1968	247,100	70,367	147,380	20,131	120,790			54,065	33,075		23,000	63,270	
1969	259,100	81,100	159,000	24,810	133,600		1,540	75,035	40,025		18,220	54,650	
1970	283,400	87,665	167,190	26,460	136,150		2,660	68,880	34,440		30,640	28,620	4,370
1971	301,150	80,250	134,470	16,326	118,059		1,663	73,196	53,826		36,140	26,740	4,700
1972	230,000	63,900	137,000	12,800	105,000	6,400	3,000	61,000	20,000		25,500	19,000	6,400
1973	307,974	106,150	201,560	23,209	159,473	22,374		63,006			44,655	59,849	34,547
1974	307,200	101,101	192,100		159,000								
1975	280,019	102,668	175,850										
1976	289,592	125,575	173,125	11,600	143,474	22,054	8,198	86,763	57,598		52,097	61,874	42,721
1977	279,689	103,776	170,074	11,302	141,596	17,691	5,668	87,493	56,405		57,985	57,264	40,638
1978	270,413	101,916	142,809	14,268	120,503	34,329	8,306	82,758	36,104	33,726	46,487	56,769	40,726
1979	241,972	73,461	114,642	10,029	111,434	23,465	4,931	74,989	28,779	30,735	45,432	44,884	34,240
1980	252,440	86,816	119,901	8,526	111,425	27,554	9,281	65,206	25,348	25,441	39,900	39,666	34,125
1981	254,803	97,430	150,881	11,106	117,942	28,731	7,059	55,394	24,277	22,266	36,108	43,985	35,443
1982	214,263	68,479	118,994	4,862	105,262	21,532	8,317	56,335	27,211	22,149	33,321	39,754	32,852
1983	203,014	63,060	118,535	7,331	98,553	25,366	5,701	53,446	20,728	16,761	27,631	39,401	28,652
1984	176,312	58,630	102,993	5,543	86,380	21,179	7,573	53,187	26,681	22,702	25,977	35,144	33,322
1985	175,225	54,427	107,500	6,568	88,849	25,956	5,949	39,832	21,629	15,234	"------Discontinued------"		
1986	184,759	63,985	92,727	5,193	84,082	30,822	6,874	44,184	24,646	16,331			
1987	212,118	83,754	103,199	7,298	77,819	40,878	6,053	36,805	18,391	14,201			
1988	204,659	74,584	84,529	4,376	74,783	44,154	8,353	25,657	16,309	9,348			
1989	211,586	79,971	89,054	5,634	80,937	48,785	9,611	24,032	16,275	11,253			
1990	210,845	72,886	87,437	4,679	70,539	49,220	7,095	23,568	14,792	6,900			
1991	202,319	62,684	83,200	4,001	63,601	25,165	4,884	26,261	17,073	6,828			
1992	176,430	56,287	66,967	5,802	60,443	22,949	4,378	34,270	23,538	10,485			
1993	166,260	49,345	65,704	1,547	62,175	14,920	2,197	28,292	19,839	10,164			
1994	189,664	50,258	68,840	1,239	57,381	18,294	2,521	29,843	25,544	10,107			
1995	200,302	50,839	68,499	4,361	57,495	15,954	3,940	41,620	31,795	10,034			
1996	205,592	44,974	75,870	2,623	56,382	21,914	2,525	35,670	29,743	7,076			
1997	205,203	35,473	51,785	2,872	43,632	12,330	2,031	46,831	35,781	10,360			
1998	184,585	32,378	54,588	1,604	53,859	13,502	152	41,165	30,258	9,992			
1999[a]	181,673	41,117	50,254	2,456	46,994	11,390	1,481	"------Discontinued------"					
2000	167,521	39,957	46,311	1,572	35,395	6,043	960						
2001	122,906	24,591	36,125	2,933	36,760	5,757	3,227						
Statistics:													
10 Year Avg.	180,014	42,522	58,494	2,701	51,052	14,305	2,341						
Long-term Avg.	227,159	68,106	116,711	10,876	97,362	23,525	4,871	52,195	28,418	15,338	32,992	45,813	28,672
Percent Change from:													
2000	-26.6	-38.5	-22.0	86.6	3.9	-4.7	236.1						
10 Year Avg.	-31.7	-42.2	-38.2	8.6	-28.0	-59.8	37.8						
Long-term Avg.	-45.9	-63.9	-69.0	-73.0	-62.2	-75.5	-33.7						

[a] Small Game Harvest Survey changed from a single to a double mailing. Hunter estimates from 1999-present are more conservative than pre-1999 estimates.

Table 5.10 Iowa's ring-necked pheasant hunting seasons.

YEAR	DATES REGULAR / YOUTH	SEASON LENGTH	SHOOTING HOURS	LIMIT - BAG/POSS REGULAR	LIMIT - BAG/POSS YOUTH	# COUNTIES OPEN
1946	28 OCT-17 NOV	21	1000-1600	3/6		59
1947	11 NOV-20 NOV	10	1200-1600	2/2		64
1948	11 NOV-30 NOV	20	1200-1600	2/4		68
	11 NOV- 5 DEC	25	1200-1630	2/4		68
1949	11 NOV-17 NOV	7	1200-1630	2/4		11
1950	11 NOV- 5 DEC	25	1200-1630	3/3		70
	11 NOV-20 NOV	10	1200-1630	3/3		13
1951	11 NOV- 5 DEC	25	1200-1630	3/3		65
	11 NOV-22 NOV	12	1200-1630	3/3		27
1952	18 NOV-12 DEC	25	1200-1630	3/3		65
	18 NOV-29 NOV	12	1200-1630	3/3		27
1953	11 NOV- 5 DEC	25	1200-1630	3/3		69
	11 NOV-22 NOV	12	1200-1630	3/3		23
1954	11 NOV- 5 DEC	25	1200-1630	3/3		70
	11 NOV-22 NOV	12	1200-1630	3/3		22
1955	12 NOV- 5 DEC	24	1200-1630	3/3		70
	12 NOV-24 NOV	13	1200-1630	3/3		22
1956	10 NOV- 3 DEC	24	1200-1630	3/3		70
	10 NOV-22 NOV	13	1200-1630	3/3		22
1957	9 NOV- 2 DEC	24	1200-1630	3/3		70
	9 NOV-21 NOV	13	1200-1630	3/3		22
1958	8 NOV- 1 DEC	24	1000-1630	3/6		70
	8 NOV-23 NOV	16	1000-1630	3/6		22
1959	14 NOV- 7 DEC	24	0900-1630	3/6		70
	14 NOV-29 NOV	16	0900-1630	3/6		22
1960	5 NOV-28 NOV	24	0900-1630	3/6		92
1961	11 NOV-15 DEC	35	0900-1630	3/6		92
1962	10 NOV-14 DEC	35	0900-1630	3/6		92
1963-64	9 NOV- 1 JAN	54	0830-1700	3/9		92
1964-65	7 NOV- 3 JAN	58	0830-1700	3/9		92
1965-66	13 NOV- 2 JAN	51	0830-1600	2/6		92
1966-67	12 NOV- 2 JAN	52	0800-1630	3/6		92
1967-68	11 NOV- 1 JAN	52	0800-1630	3/6		94
1968-69	9 NOV-31 DEC	53	0800-1630	3/6		94
1969-70	8 NOV-31 DEC	54	0800-1630	3/6		94
1970-71	14 NOV- 3 JAN	51	0800-1630	3/6		94
1971-72	13 NOV- 2 JAN	51	0800-1630	3/6		96
1972-73	11 NOV- 1 JAN	52	0800-1630	3/12		96
1973-74	10 NOV- 6 JAN	58	0800-1630	3/12		96
1974-75	9 NOV- 5 JAN	58	SUNRISE-SUNSET	3/12		97
1975-76	8 NOV- 4 JAN	58	0800-1630	3/6		97
1976-77	6 NOV- 2 JAN	58	0800-1630	3/6		STATEWIDE
1977-78	5 NOV- 1 JAN	58	0800-1630	3/6		STATEWIDE
1978-79	4 NOV- 1 JAN	60	0800-1630	3/6		STATEWIDE
1979-80	3 NOV- 6 JAN	65	0800-1630	3/6		STATEWIDE

Table 5.10 Iowa's ring-necked pheasant hunting seasons.

YEAR	DATES REGULAR / YOUTH	SEASON LENGTH	SHOOTING HOURS	LIMIT - BAG/POSS REGULAR	LIMIT - BAG/POSS YOUTH	# COUNTIES OPEN
1980-81	1 NOV- 4 JAN	65	0800-1630	3/6		STATEWIDE
1981-82	7 NOV- 3 JAN	58	0800-1630	3/6		STATEWIDE
1982-83	6 NOV- 2 JAN	58	0800-1630	3/6		STATEWIDE
1983-84	5 NOV- 1 JAN	58	0800-1630	3/6		STATEWIDE
1984-85	3 NOV- 1 JAN	60	0800-1630	3/6		STATEWIDE
1985-86	2 NOV- 5 JAN	65	0800-1630	3/9		STATEWIDE
1986-87	1 NOV- 4 JAN	65	0800-1630	3/9		STATEWIDE
1987-88	31 OCT- 3 JAN	65	0800-1630	3/12		STATEWIDE
1988-89	29 OCT- 8 JAN	72	0800-1630	3/12		STATEWIDE
1989-90	28 OCT-10 JAN	75	0800-1630	3/12		STATEWIDE
1990-91	27 OCT-10 JAN	76	0800-1630	3/12		STATEWIDE
1991-92	26 OCT-10 JAN	77	0800-1630	3/12		STATEWIDE
1992-93	31 OCT-10 JAN	72	0800-1630	3/12		STATEWIDE
1993-94	30 OCT-10 JAN	72	0800-1630	3/12		STATEWIDE
1994-95	29 OCT-10 JAN	74	0800-1630	3/12		STATEWIDE
1995-96	28 OCT-10 JAN	75	0800-1630	3/12		STATEWIDE
1996-97	26 OCT-10 JAN	77	0800-1630	3/12		STATEWIDE
1997-98[1]	26 OCT-10 JAN / 18-19 OCT	78/2	0800-1630	3/12	1/2	STATEWIDE
1998-99	31 OCT-10 JAN / 23-24 OCT	72/2	0800-1630	3/12	1/2	STATEWIDE
1999-00	30 OCT-10 JAN / 22-23 OCT	73/2	0800-1630	3/12	1/2	STATEWIDE
2000-01	28 OCT-10 JAN / 21-22 OCT	75/2	0800-1630	3/12	1/2	STATEWIDE
2001-02	27 OCT-10 JAN / 20-21 OCT	76/2	0800-1630	3/12	1/2	STATEWIDE

[1] Iowa's first youth pheasant season, open to resident hunters 15 years or younger.

Table 5.11 Iowa's Bobwhite quail hunting seasons.

YEAR	DATES	SEASON LENGTH	SHOOTING HOURS	LIMIT BAG/POSS	AREA OPEN
1963-64	2 NOV- 1 JAN	61	0830-1700	6/12	STATEWIDE
1964-65	31 OCT- 3 JAN	65	0830-1700	8/16	STATEWIDE
1965-66	6 NOV-31 JAN	86	0830-1600	8/16	STATEWIDE
1966-67	22 OCT-31 JAN	102	0800-1630	8/16	STATEWIDE
1967-68	21 OCT-28 JAN	103	0800-1630	8/16	STATEWIDE
1968-69	26 OCT-31 JAN	98	0800-1630	8/16	STATEWIDE
1969-70	25 OCT-31 JAN	99	0800-1630	8/16	STATEWIDE
1970-71	24 OCT-31 JAN	100	0800-1630	8/16	STATEWIDE
1971-72	23 OCT-31 JAN	101	0800-1630	8/16	STATEWIDE
1972-73	28 OCT-31 JAN	96	0800-1630	8/16	STATEWIDE
1973-74	27 OCT-31 JAN	97	0800-1630	8/16	STATEWIDE
1974-75	26 OCT-31 JAN	98	SUNRISE-SUNSET	8/16	STATEWIDE
1975-76	25 OCT-31 JAN	99	0800-1630	8/16	STATEWIDE
1976-77	6 NOV-31 JAN	86	0800-1630	8/16	STATEWIDE
1977-78	5 NOV-31 JAN	87	0800-1630	8/16	STATEWIDE
1978-79	4 NOV-31 JAN	88	0800-1630	8/16	STATEWIDE
1979-80	3 NOV- 6 JAN	64	0800-1630	6/12	STATEWIDE
1980-81	1 NOV-31 JAN	92	0800-1630	8/16	STATEWIDE
1981-82	7 NOV-31 JAN	86	0800-1630	8/16	STATEWIDE
1982-83	6 NOV-31 JAN	87	0800-1630	8/16	STATEWIDE
1983-84	5 NOV-31 JAN	88	0800-1630	8/16	STATEWIDE
1984-85	3 NOV-31 JAN	90	0800-1630	8/16	STATEWIDE
1985-86	2 NOV-31 JAN	91	0800-1630	8/16	STATEWIDE
1986-87	1 NOV-31 JAN	92	0800-1630	8/16	STATEWIDE
1987-88	31 OCT-31 JAN	93	0800-1630	8/16	STATEWIDE
1988-89	29 OCT-31 JAN	95	0800-1630	8/16	STATEWIDE
1989-90	28 OCT-31 JAN	96	0800-1630	8/16	STATEWIDE
1990-91	27 OCT-31 JAN	97	0800-1630	8/16	STATEWIDE
1991-92	26 OCT-31 JAN	98	0800-1630	8/16	STATEWIDE
1992-93	31 OCT-31 JAN	93	0800-1630	8/16	STATEWIDE
1993-94	30 OCT-31 JAN	93	0800-1630	8/16	STATEWIDE
1994-95	29 OCT-31 JAN	95	0800-1630	8/16	STATEWIDE
1995-96	28 OCT-31 JAN	96	0800-1630	8/16	STATEWIDE
1996-97	26 OCT-31 JAN	98	0800-1630	8/16	STATEWIDE
1997-98	25 OCT-31 JAN	99	0800-1630	8/16	STATEWIDE
1998-99	31 OCT-31 JAN	93	0800-1630	8/16	STATEWIDE
1999-00	30 OCT-31 JAN	94	0800-1630	8/16	STATEWIDE
2000-01	28 OCT-31 JAN	96	0800-1630	8/16	STATEWIDE
2001-02	27 OCT-31 JAN	97	0800-1630	8/16	STATEWIDE

Table 5.12 Iowa's Hungarian partridge hunting seasons.

YEAR	DATES	SEASON LENGTH	SHOOTING HOURS	LIMIT BAG/POSS	AREA OPEN
1963-64	9 NOV- 1 JAN	54	0830-1700	2/4	16 NW COUNTIES
1964-65	7 NOV- 3 JAN	58	0830-1700	2/4	W US 65, N US 20
1965-66	13 NOV- 2 JAN	51	0830-1600	2/4	W US 65, N US 20
1966-67	12 NOV- 2 JAN	52	0800-1630	2/4	W US 65, N US 20
1967-68	11 NOV- 1 JAN	52	0800-1630	2/4	W US 65, N US 20
1968-69	9 NOV-31 DEC	53	0800-1630	4-Feb	?
1969-70	8 NOV-31 DEC	54	0800-1630	2/4	?
1970-71	14 NOV- 3 JAN	51	0800-1630	2/4	W. US 65; N. US 30, I29, STATE 141
1971-72	13 NOV- 2 JAN	51	0800-1630	2/4	W. US 65; N. US 30, I29, STATE 141
1972-73	11 NOV- 1 JAN	52	0800-1630	4/8	W. US 65; N. US 30, I29, STATE 141
1973-74	10 NOV- 6 JAN	58	0800-1630	4/8	N. US 30
1974-75	9 NOV- 5 JAN	58	SUNRISE-SUNSET	4/8	N. US 30
1975-76	8 NOV- 4 JAN	58	0800-1630	4/8	N. US 30
1976-77	6 NOV- 2 JAN	58	0800-1630	4/8	N. US 30
1977-78	5 NOV- 1 JAN	58	0800-1630	6/12	N. US 30
1978-79	4 NOV- 1 JAN	60	0800-1630	6/12	N. US 30
1979-80	3 NOV- 6 JAN	65	0800-1630	6/12	N. US 30
1980-81	1 NOV-31 JAN	92	0800-1630	6/12	N. I-80
1981-82	7 NOV-31 JAN	86	0800-1630	6/12	N. I-80
1982-83	6 NOV-31 JAN	87	0800-1630	6/12	N. I-80
1983-84	5 NOV-31 JAN	88	0800-1630	6/12	N. I-80
1984-85	3 NOV-31 JAN	90	0800-1630	6/12	N. I-80
1985-86	2 NOV-31 JAN	91	0800-1630	6/12	N. I-80
1986-87	1 NOV-31 JAN	92	0800-1630	6/12	STATEWIDE
1987-88	31 OCT-31 JAN	93	0800-1630	8/16	STATEWIDE
1988-89	29 OCT-31 JAN	94	0800-1630	8/16	STATEWIDE
1989-90	7 OCT-31 JAN	117	0800-1630	8/16	STATEWIDE
1990-91	6 OCT-31 JAN	118	0800-1630	8/16	STATEWIDE
1991-92	5 OCT-31 JAN	119	0800-1630	8/16	STATEWIDE
1992-93	10 OCT-31 JAN	114	0800-1630	8/16	STATEWIDE
1993-94	9 OCT-31 JAN	115	0800-1630	8/16	STATEWIDE
1994-95	8 OCT-31 JAN	116	0800-1630	8/16	STATEWIDE
1995-96	14 OCT-31 JAN	109	0800-1630	8/16	STATEWIDE
1996-97	12 OCT-31 JAN	112	0800-1630	8/16	STATEWIDE
1997-98	11 OCT-31 JAN	113	0800-1630	8/16	STATEWIDE
1998-99	10 OCT-31 JAN	114	0800-1630	8/16	STATEWIDE
1999-00	9 OCT-31 JAN	115	0800-1630	8/16	STATEWIDE
2000-01	14 OCT-31 JAN	110	0800-1630	8/16	STATEWIDE
2001-02	13 OCT-31 JAN	111	0800-1630	8/16	STATEWIDE

Table 5.13 Iowa's cottontail and jackrabbit seasons.

YEAR	DATES COTTONTAILS / JACKRABBITS	SEASON LENGTH	SHOOTING HOURS	LIMIT - BAG/POSS COTTONTAILS	JACKRABBITS	AREA OPEN
1963-64	14 SEP-23 FEB	163	0600-1800	AGGREGATE - 10/NONE		STATEWIDE
1964-65	12 SEP-21 FEB	163	0600-1800	AGGREGATE - 10/NONE		STATEWIDE
1965-66	12 SEP-21 FEB	163	0600-1800	AGGREGATE - 10/NONE		STATEWIDE
1966-67	10 SEP-19 FEB	163	0600-1800	AGGREGATE - 10/NONE		STATEWIDE
1967-68	15 SEP-17 FEB	163	0600-1800	AGGREGATE - 10/NONE		STATEWIDE
1968-69	14 SEP-16 FEB	163	0600-1800	AGGREGATE - 10/NONE		STATEWIDE
1969-70	13 SEP-15 FEB	163	0600-1800	AGGREGATE - 10/NONE		STATEWIDE
1970-71	12 SEP-28 FEB	170	0600-1800	AGGREGATE - 10/NONE		STATEWIDE
1971-72	11 SEP-29 FEB	171	0600-1800	AGGREGATE - 10/NONE		STATEWIDE
1972-73	9 SEP-28 FEB	173	0600-1800	AGGREGATE - 10/NONE		STATEWIDE
1973-74	8 SEP-28 FEB	174	0600-1800	AGGREGATE - 10/NONE		STATEWIDE
1974-75	7 SEP-28 FEB	175	SUNRISE-SUNSET	AGGREGATE - 10/NONE		STATEWIDE
1975-76	6 SEP-28 FEB	176	SUNRISE-SUNSET	AGGREGATE - 10/NONE		STATEWIDE
1976-77	11 SEP-28 FEB	171	SUNRISE-SUNSET	AGGREGATE - 10/NONE		STATEWIDE
1977-78	3 SEP-28 FEB	179	SUNRISE-SUNSET	AGGREGATE - 10/NONE		STATEWIDE
1978-79	2 SEP-28 FEB/4 NOV-7 JAN	180/65	SUNRISE-SUNSET	10/NONE	3/6	STATEWIDE
1979-80	1 SEP-29 FEB/3 NOV-6 JAN	182/65	SUNRISE-SUNSET	10/20	3/6	STATEWIDE
1980-81	6 SEP-28 FEB/1 NOV-4 JAN	176/65	SUNRISE-SUNSET	10/20	3/6	STATEWIDE
1981-82	5 SEP-28 FEB/7 NOV-3 JAN	177/58	SUNRISE-SUNSET	10/20	3/6	STATEWIDE
1982-83	4 SEP-28 FEB/6 NOV-2 JAN	178/58	SUNRISE-SUNSET	10/20	3/6	STATEWIDE
1983-84	3 SEP-29 FEB/5 NOV-18 DEC	180/44	SUNRISE-SUNSET	10/20	3/6	STATEWIDE
1984-85	1 SEP-28 FEB/3 NOV-16 DEC	181/44	SUNRISE-SUNSET	10/20	3/6	STATEWIDE
1985-86	31 AUG-28 FEB/2 NOV-15 DEC	182/44	SUNRISE-SUNSET	10/20	3/6	STATEWIDE
1986-87	30 AUG-28 FEB/1 NOV-14 DEC	183/44	SUNRISE-SUNSET	10/20	3/6	STATEWIDE
1987-88	5 SEP-29 FEB/31 OCT-13 DEC	178/44	SUNRISE-SUNSET	10/20	3/6	STATEWIDE
1988-89	3 SEP-28 FEB/28 OCT-10 DEC	179/44	SUNRISE-SUNSET	10/20	3/6	STATEWIDE
1989-90	2 SEP-28 FEB/29 OCT-11 DEC	180/44	SUNRISE-SUNSET	10/20	3/6	STATEWIDE
1990-91	1 SEP-28 FEB/27 OCT-9 DEC	181/44	SUNRISE-SUNSET	10/20	3/6	STATEWIDE
1991-92	31 AUG-29 FEB/26 OCT-8 DEC	183/44	SUNRISE-SUNSET	10/20	3/6	STATEWIDE
1992-93	5 SEP-28 FEB/31 OCT-6 DEC	177/37	SUNRISE-SUNSET	10/20	3/6	STATEWIDE
1993-94	4 SEP-28 FEB/30 OCT-5 DEC	176/37	SUNRISE-SUNSET	10/20	2/4	STATEWIDE
1994-95	3 SEP-28 FEB/29 OCT-4 DEC	177/37	SUNRISE-SUNSET	10/20	2/4	STATEWIDE
1995-96	2 SEP-28 FEB/28 OCT-1 DEC	178/35	SUNRISE-SUNSET	10/20	2/4	STATEWIDE
1996-97	7 SEP-28 FEB/26 OCT-1 DEC	174/37	SUNRISE-SUNSET	10/20	2/4	STATEWIDE
1997-98	1 SEP-28 FEB/25 OCT-1 DEC	181/38	SUNRISE-SUNSET	10/20	2/4	STATEWIDE
1998-99	1 SEP-28 FEB/30 OCT-1 DEC	181/33	SUNRISE-SUNSET	10/20	2/4	STATEWIDE
1999-00	1 SEP-28 FEB/30 OCT-1 DEC	181/33	SUNRISE-SUNSET	10/20	2/4	STATEWIDE
2000-01	1 SEP-28 FEB/28 OCT-1 DEC	181/35	SUNRISE-SUNSET	10/20	2/4	STATEWIDE
2001-02	1 SEP-28 FEB/27 OCT-1 DEC	181/36	SUNRISE-SUNSET	10/20	2/4	STATEWIDE

1963-1977 SEASONS AND LIMITS ARE AN AGGREGATE OF COTTONTAILS AND JACKRABBITS.

Figure 5.2 Statewide trends in pheasant harvest and August roadside survey counts

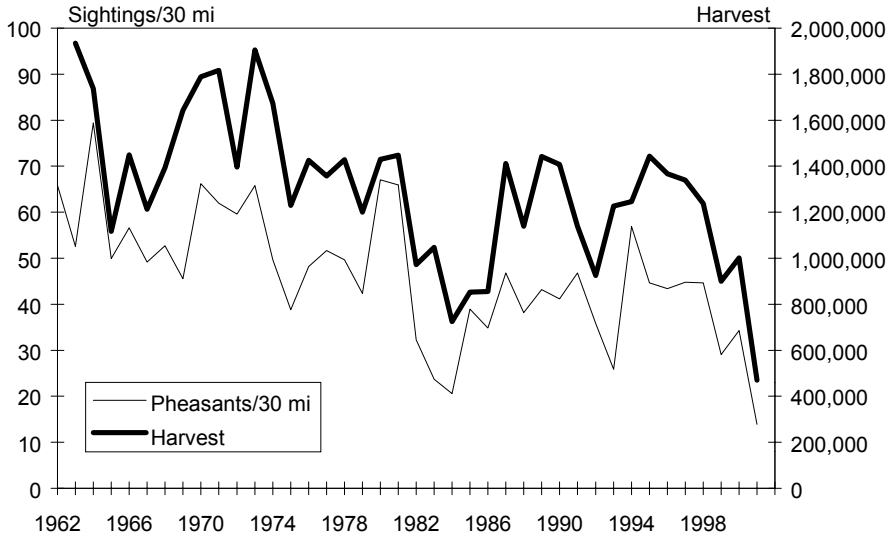


Figure 5.3 Statewide trends in pheasant broods and average brood size from August roadside survey

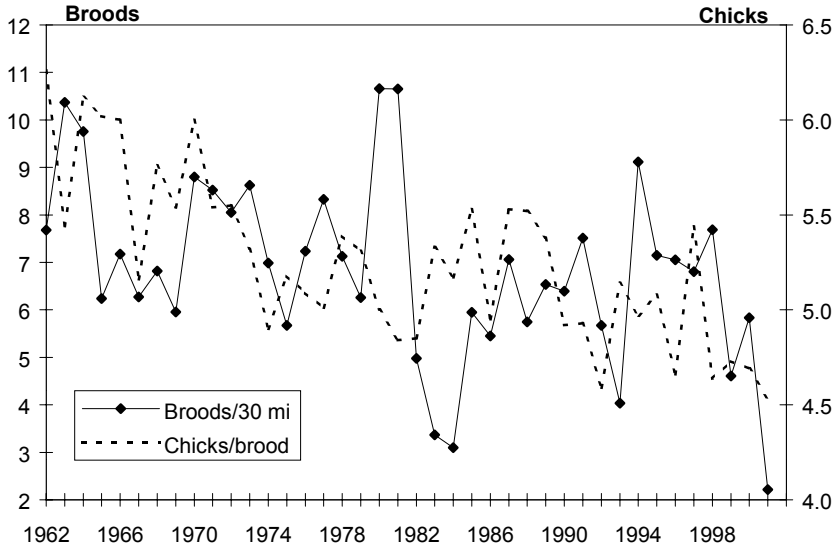


Figure 5.4 Statewide sex ratio and estimated cock harvest from winter pheasant surveys

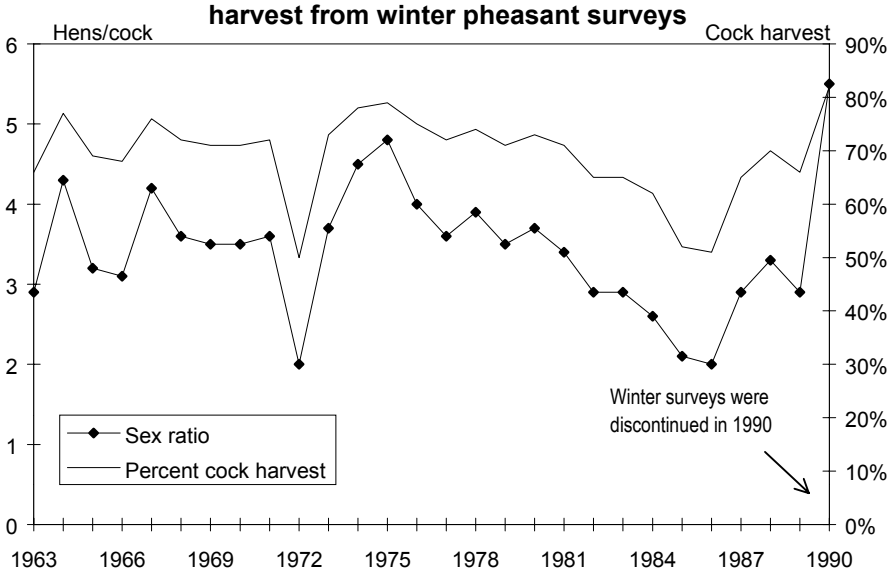


Figure 5.5 Statewide trends in pheasant hens with and without broods from August roadside survey

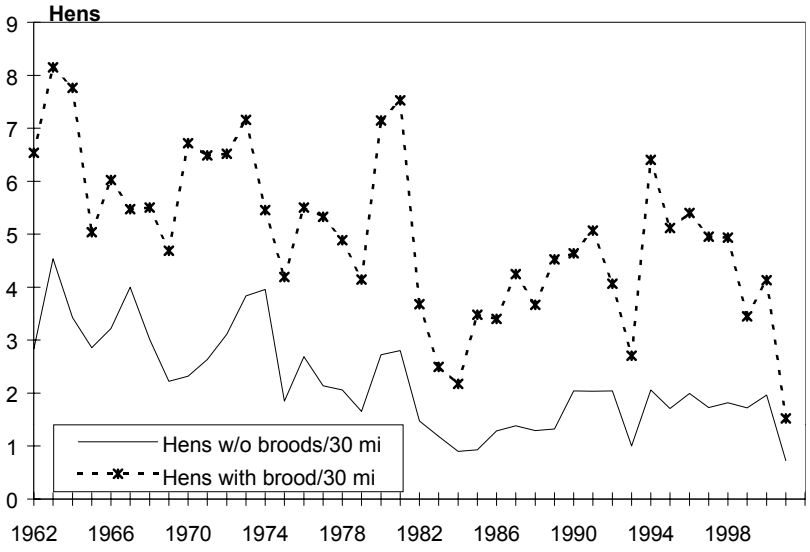
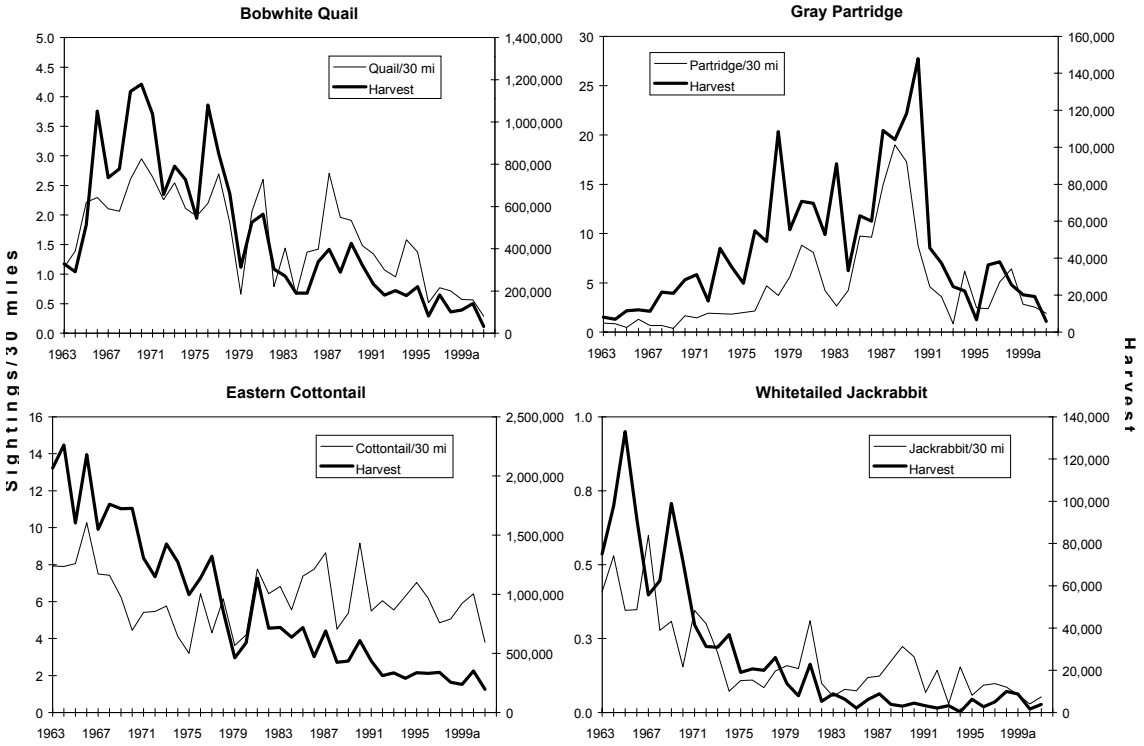


Figure 5.6 Statewide trends in small game harvests and August roadside survey counts



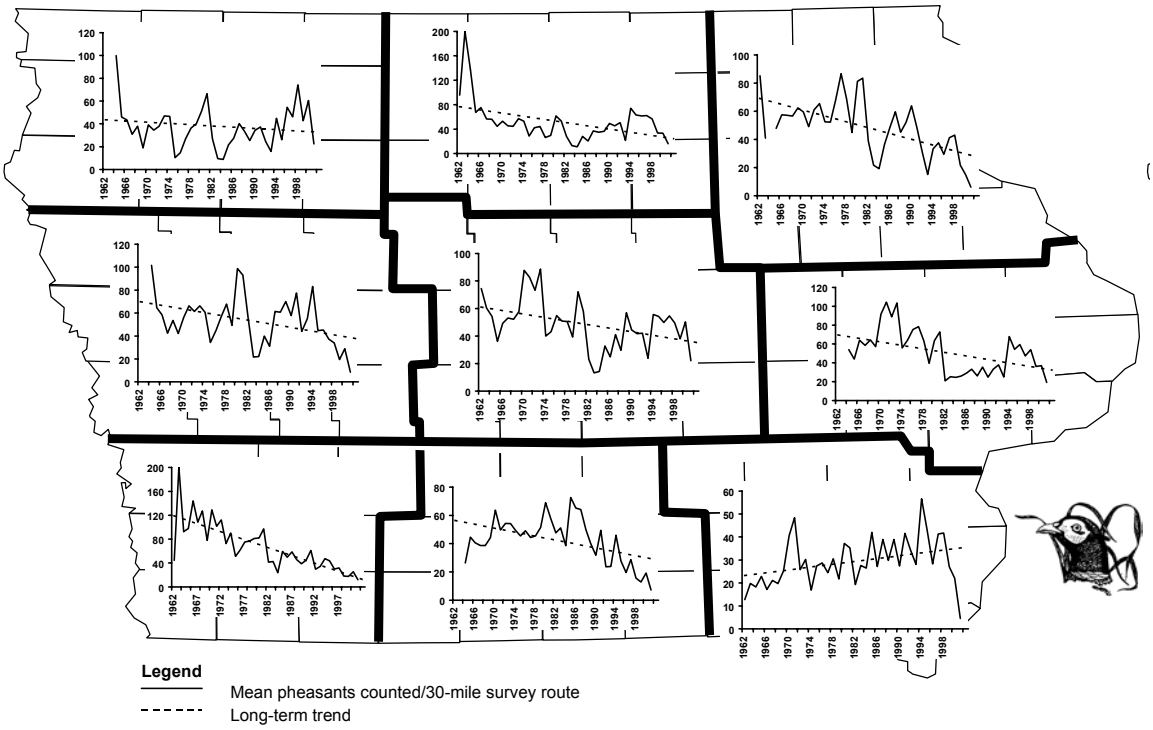


Figure 5.7 Regional trends in ring-necked pheasant numbers from the August roadside survey (1962-present).

Note: Because of variation in historical counts, vertical axises among survey regions are not to the same scale.

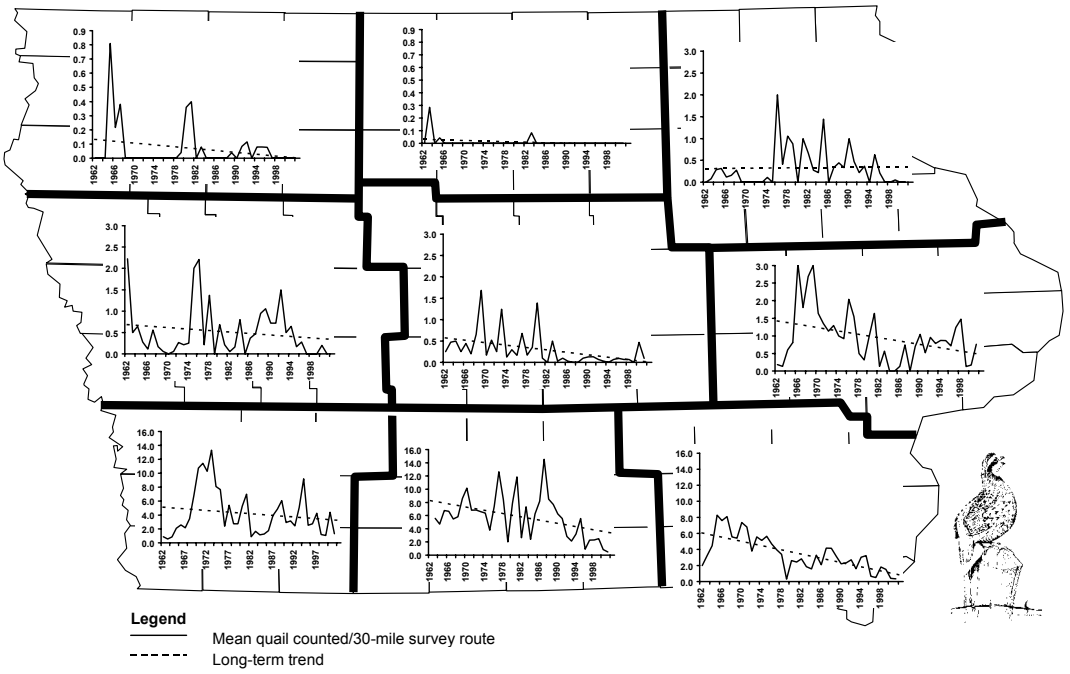


Figure 5.8 Regional trends in bobwhite quail numbers from the August roadside survey (1962-present).

Note: Because of variation in historical counts, vertical axises among survey regions are not to the same scale.

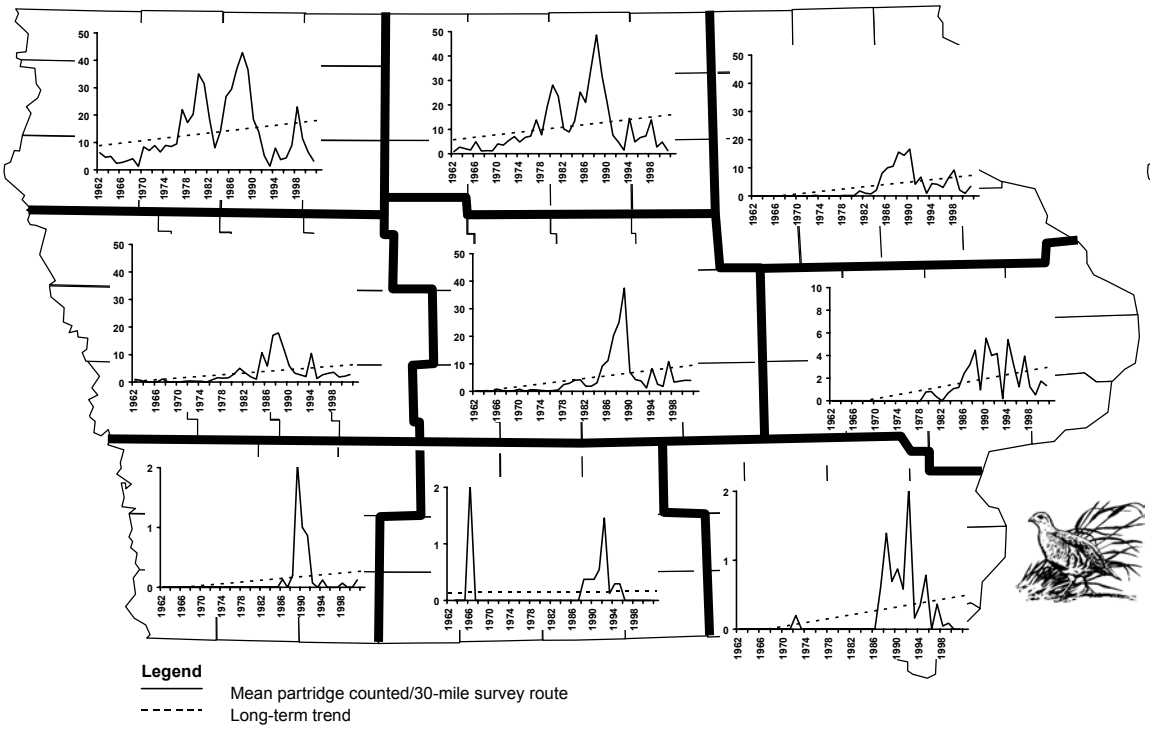


Figure 5.9 Regional trends in gray partridge numbers from the August roadside survey (1963-present).

Note: Because of variation in historical counts, vertical axises among survey regions are not to the same scale.

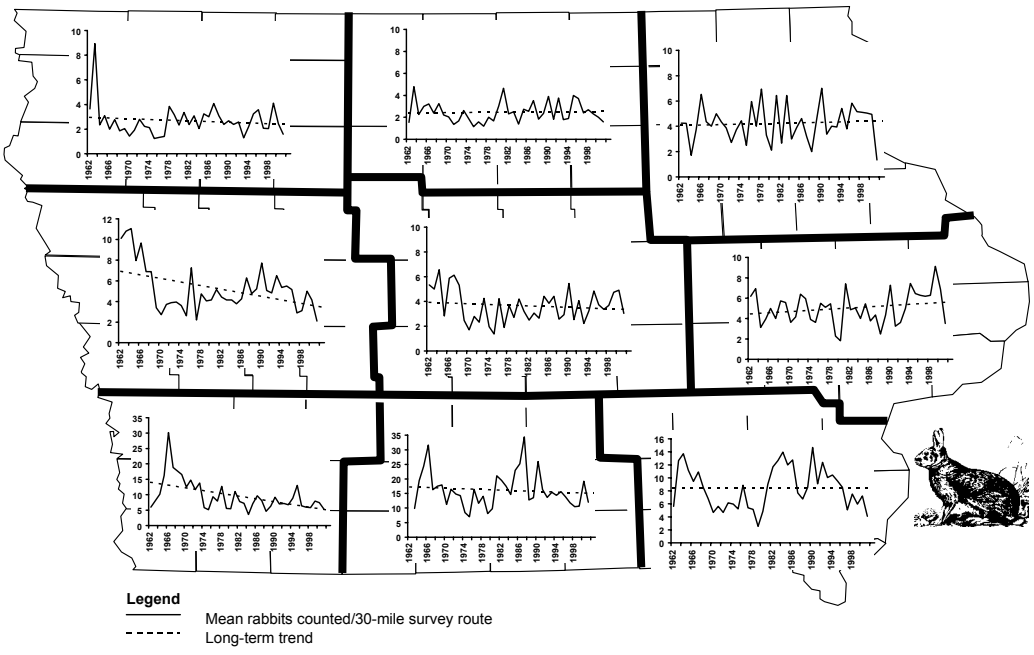


Figure 5.10 Regional trends in cottontail rabbit numbers from the August roadside survey (1962-present).

Note: Because of variation in historical counts, vertical axises among survey regions are not to the same scale.

Figure 5.11 Sales of Iowa hunting licenses

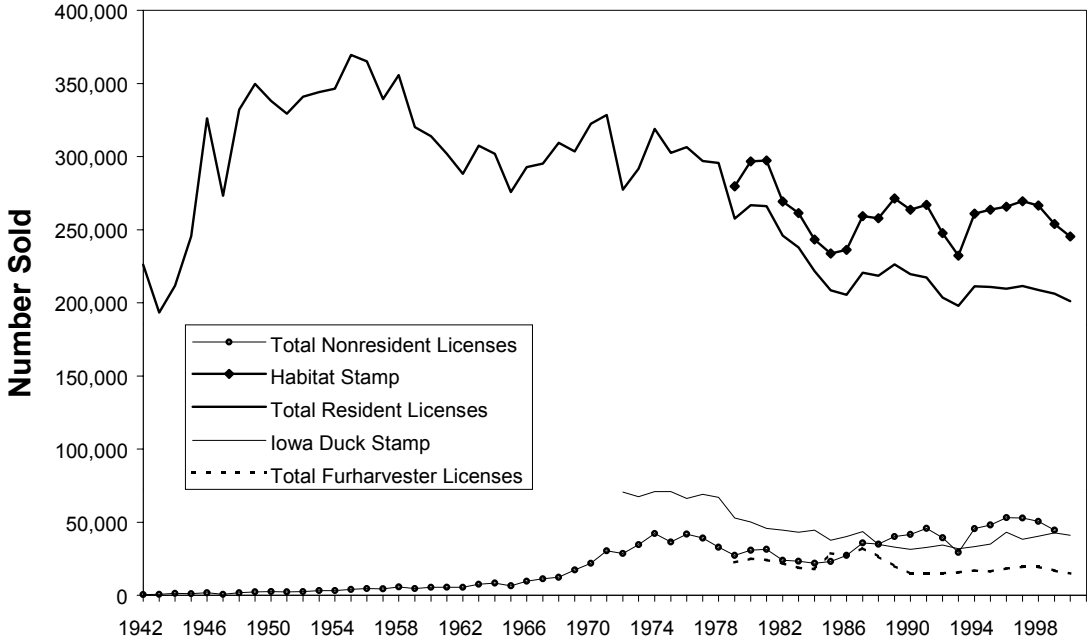


Figure 5.12 Estimated number of Iowa small-game hunters